

A ♦ S ♦ O ♦ E
YEAR BOOK
1913





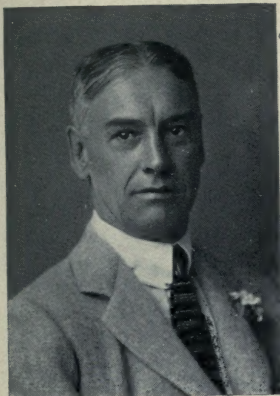
ENGINEERING SOCIETIES BUILDING

Headquarters of the Society

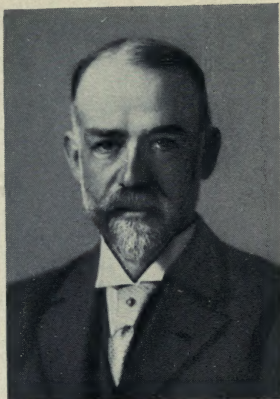


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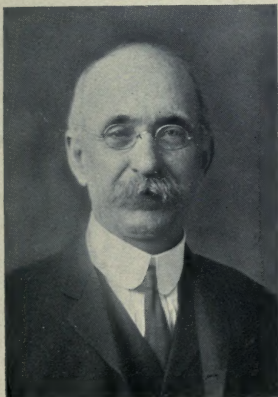
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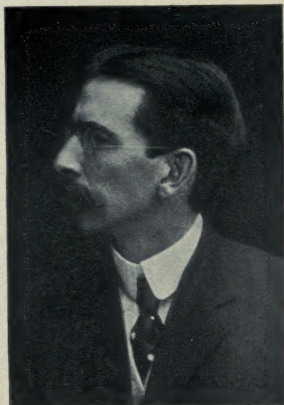
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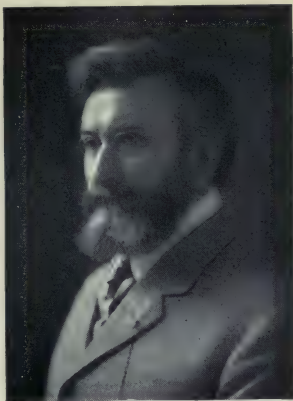
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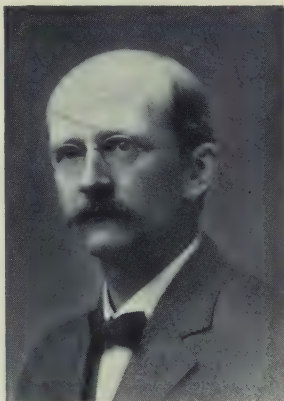
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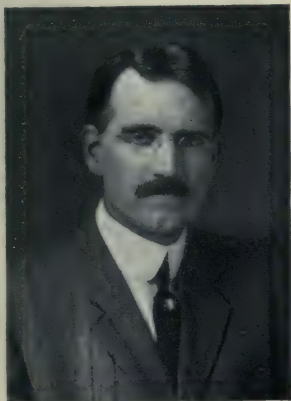
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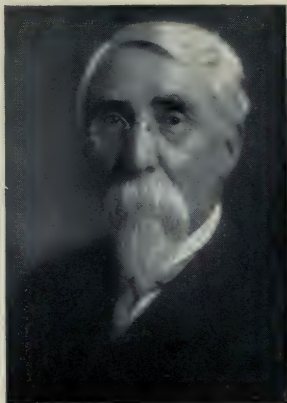
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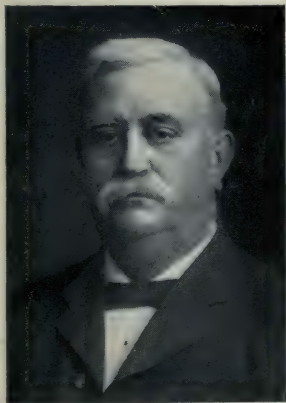
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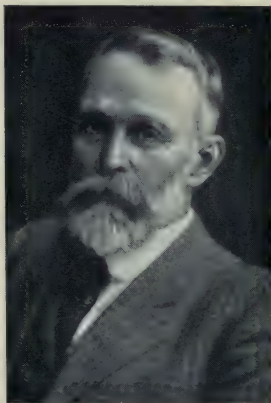
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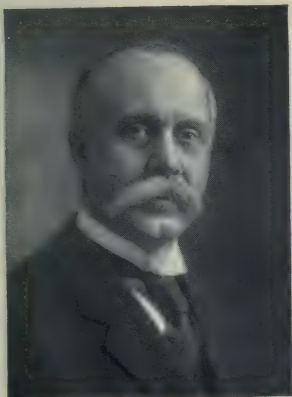
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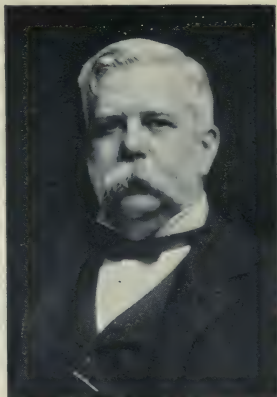
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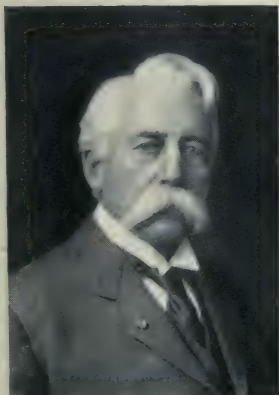
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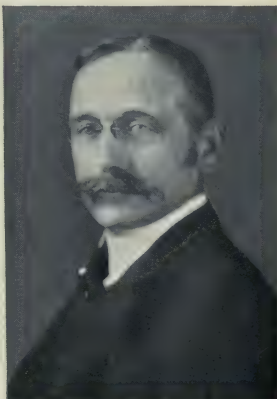
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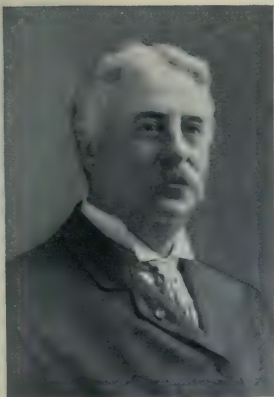
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7
Techno

THE AMERICAN SOCIETY OF
MECHANICAL ENGINEERS

YEAR BOOK

CONTAINING LISTS OF MEMBERS
ARRANGED ALPHABETICALLY
AND GEOGRAPHICALLY

CORRECTED TO JANUARY 1, 1913



NEW YORK
29 WEST 39TH STREET
1913

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THE AMERICAN SOCIETY OF
MECHANICAL ENGINEERS

LIBRARY
YEAR BOOK

CONTAINING PAPERS ON MECHANICAL
ENGINEERING AND MECHANICS
AND ELECTRICAL ENGINEERING

PUBLISHED BY THE SOCIETY OF MECHANICAL ENGINEERS



NEW YORK

1900

Published by the American Society of Mechanical Engineers
1290 Avenue of the Americas, New York, N. Y.

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DIRECTIONS FOR USING THIS BOOK

For business addresses of members residing in any particular city or town, consult the Geographical List (p. 217), which is arranged alphabetically by countries, states, cities and names of members; both business and home addresses will be found in the Alphabetical List (p. 3). The date after each name is that at which membership in the Society began. Where there are two dates, election to the present grade of membership from another grade took place at the later date.

Where two addresses are given, the first is the business address. The words "and *for mail*" are used when the preferred address for mail is not the first address.

Each of these lists contains the names of members of all grades, including Honorary Members, Life Members, Members, Juniors and Associates. Names of Affiliates of the Gas Power Section and of Members of Student Branches will be found in separate lists.

LONG DISTANCE TELEPHONE

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THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

29 West 39th Street, New York

CALENDAR

SPRING MEETING, Baltimore, Md., May 20-23, 1913.

ANNUAL MEETING, New York, December 2-5, 1913.

JOINT MEETING with the Verein deutscher Ingenieure, Leipzig,
June 23-24, 1913.

MONTHLY MEETINGS

New York, second Tuesdays, October to May, 8:15 p. m.

In the following places, at dates to be announced: Boston,
Buffalo, Chicago, Cincinnati, New Haven, Philadelphia,
Providence, St. Louis and San Francisco.

THE ROOMS OF THE SOCIETY on the eleventh floor of the Engineering Societies Building are open and visitors are welcome, from nine to five, except Sundays and holidays, throughout the year. These holidays comprise New Year's, Lincoln's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Election Day, Thanksgiving Day and Christmas.

THE LIBRARY OF THE ENGINEERING SOCIETIES, containing the libraries of the American Institute of Mining Engineers, The American Society of Mechanical Engineers, and the American Institute of Electrical Engineers, on the thirteenth floor of the Engineering Societies Building, is open, except on Christmas and Christmas eve, New Year's and New Year's eve, Thanksgiving and Independence Day, from 9 a. m. to 9 p. m.; in July and August, to 6 p. m.

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GENERAL INFORMATION

HEADQUARTERS

The headquarters of The American Society of Mechanical Engineers are in the Engineering Societies Building, 29 West Thirty-ninth Street, New York, which was given by Andrew Carnegie, Hon. Mem. Am. Soc. M. E., as a home for the American Institute of Mining Engineers, The American Society of Mechanical Engineers and the American Institute of Electrical Engineers. Other kindred societies have offices in the building and share in the privileges of the auditoriums for meeting purposes. The location is about midway between Fifth Avenue and Broadway, a short distance only from the Grand Central Station and the Pennsylvania Station, and from subway, surface and elevated lines, the new public library, the theatre district in the vicinity of Times Square, and the shopping district at Thirty-fourth Street.

The Engineering Societies Building is 13 stories high, has a frontage of 115 feet and is 90 feet deep. On the first floor above the street is an auditorium seating 1000 persons, and on the two floors above are six auditoriums seating from 100 to 500 persons each. The library of the Society is on the two top floors. Adjoining on Fortieth Street is the Engineers' Club.

The rooms of the Society occupy the entire eleventh floor of the Engineering Societies Building and are homelike and convenient as a rendezvous for the members and their friends. All members are asked to make their headquarters here when in New York. Rooms for private consultation are also available.

MEMBERSHIP

The membership of the Society consists of Honorary Members, Members, Associates and Juniors, the qualifications for each grade being stated in the Constitution published at the back of this volume. The initiation fee for Members and Associates is \$25, and for Juniors, \$15. The annual dues are \$15 for Members and Associates; and \$10 for Juniors for the first six years, \$15 thereafter. Provision is also made for Affiliates, referred to later under "Gas Power Section" and "Student Branches."

HOW TO BECOME A MEMBER

Application for membership should be made on a standard blank form, copy of which may be procured at the office of the Secretary. In the case of application for Member or Associate grade, five references are required; in the case of Junior membership, three. An application must be submitted not later than September 1 for action at the annual meeting, and not later than February 1 for action at the spring meeting.

GENERAL INFORMATION

The approved method of submitting applications is for the applicant to fill in personally the data relating to his professional service, and before sending to the Society to submit it to the members to whom he is to refer. Endorsers are required to have personal knowledge of the professional service of the applicant and permission to use names for references must be secured in each instance. Juniors may not serve as endorsers.

When a member desires to present to the Society the name of an eligible candidate, he, acting for the candidate, must in effect carry out the provisions of the previous paragraph.

The application when complete is sent to the Secretary. The Secretary will thereupon communicate with the endorsers and submit to the Membership Committee the application and the replies from the endorsers. After having been scrutinized by the committee, the application is then referred to the Council, with the recommendation of the committee. Upon favorable action by the Council the name of the applicant will be ordered printed on the ballot and submitted to the voting membership for their action. Notice of election will be sent to the candidate in due course.

MEETINGS

The Society regularly holds two general meetings or conventions: The annual meeting in New York, beginning with the first Tuesday in December, and the spring meeting, held in some other city, usually in May or June. These meetings are under the direction of the Committee on Meetings of the Society and papers to be presented are subject to the approval of this committee.

Monthly meetings are held in New York on the evenings of the second Tuesdays in October, November, January, February, March and April. The Constitution provides for the holding of other meetings upon the written request to the Council from fifty members. Under this provision monthly meetings have been held during the past year in Boston, St. Louis, San Francisco, Philadelphia, New Haven, Buffalo, Chicago, Providence and Cincinnati. Such meetings are conducted as sections or as meetings of the members in the locality, or of societies affiliated with this Society, according to the arrangements made in each case. The papers for these meetings are subject to the approval of the Committee on Meetings and have the same advantages of publication in The Journal and Transactions as the papers read before the annual and spring meetings.

GOVERNMENT

The Society is governed by a Council consisting of the executive officers, six vice-presidents, nine managers, the five junior past-presidents and the chairman of the finance committee. The various activities of the Society are directed by standing committees of five members each. The members are appointed in rotation by the president for five-year periods.

PROFESSIONAL COMMITTEES

Besides the standing committees, special committees are appointed to investigate and report upon questions of engineering

GENERAL INFORMATION

interest referred to them. Thus far reports have been issued as follows, available either in pamphlet form, or in a single volume the price of which is \$2.50 to members and \$5 to non-members:

Natural Gas for Industrial Purposes; Standard Pipe and Pipe Threads; Standard Method of Conducting Duty Trials of Pumping Engines; Standard Method of Conducting Locomotive Tests; Standard Thickness Gage for Metals; Standard Tests and Methods of Testing Materials; Standard Flanges; Standard Method of Conducting Steam Boiler Trials; Standardization of Engines and Dynamos; Appendix to Report on Standardization of Engines and Dynamos; Standard Pipe Unions; Supplementary Report on Standard Pipe Unions; Metric System; Standard Method of Testing Engines; Specifications for Boiler Plate, Rivet Steel, etc.; Tests of Locomotives at Louisiana Exposition; Standard Proportions for Machine Screws; Condensed Report on Standard Proportions for Machine Screws.

Sub-committees of the Committee on Meetings have been appointed to advise upon papers covering the various branches of industry to which mechanical engineering is related and to assist in the arrangement of meetings and subjects. Several reports have been issued by these sub-committees.

PUBLICATIONS

THE JOURNAL is the monthly publication of the Society, in which are printed papers to be presented at meetings, discussions upon papers, reports and notices of Society meetings, and other matters of Society interest as well as announcements and reports of meetings of other societies, and a review of articles in foreign periodicals.

Besides The Journal an annual volume of TRANSACTIONS is published containing the papers of permanent interest selected from those previously published in The Journal, in revised and corrected form, together with the proceedings of the Society for that year.

The YEAR BOOK, issued in February of each year, contains two lists of the members of the Society arranged alphabetically and geographically; also lists of members of the Gas Power Section and of Student Branches.

The Journal and Transactions are sent to all members without extra charge. The subscription price of The Journal to members, affiliates, student members, libraries and colleges is \$2 per year, and to non-members, \$3; single copies 25 cents to members, and 35 cents to non-members. Transactions bound in half morocco costs \$11 per volume, and in paper \$10 per volume, with half-rates to members, libraries and colleges. The Year Book is distributed annually to the entire membership and to others requesting it, without charge.

Papers for presentation at a meeting are usually, but not always, published in advance in pamphlet form for the convenience of those desiring to discuss them, and for distribution at the meeting. Reprints of papers and discussions appearing in Transactions are also issued. The cost of these advance papers and reprints is 10 cents per 16 pages, with half-rates to members. Special prices are made when papers are ordered in quantities.

PROFESSIONAL PAPERS

Papers and discussions of engineering interest are invited, whether from members or non-members. All papers are subject to approval and editorial supervision by the committee in charge of the meeting at which they are to be presented. Papers should contain engineering data of value to the profession, arranged for convenient reference. Matter readily accessible elsewhere, or of a speculative character, or which advocates special interests, is not available. To submit a paper it is necessary simply to send it in completed form to the Secretary.

THE LIBRARY

The joint library of the Engineering Societies, which contains the individual libraries of the American Institute of Mining Engineers, The American Society of Mechanical Engineers and the American Institute of Electrical Engineers, constitutes one of the greatest elements of usefulness of the Engineering Societies Building. It is located on the two upper floors, is maintained as a free public engineering library and contains over 50,000 volumes, one of the finest collections of engineering and scientific publications in America. Over 500 foreign and domestic technical periodicals are received as well as the proceedings of the various engineering societies of the world.

The library is open, except on Christmas and Christmas eve, New Year's and New Year's eve, Thanksgiving and Independence days, from 9 a.m. to 9 p.m., in July and August to 6 p.m., with librarians in attendance. Reading-room facilities are offered to the public at large, and full privileges can be secured by members of the founder societies upon presentation of a personal, non-transferable card issued by the Secretary of his society, or by non-members who are officially introduced by one of the Secretaries.

GAS POWER SECTION

The Council has taken action permitting the formation of professional sections, and a Gas Power Section has been organized. Members of the Gas Power Section, when not members of the Society, are designated as affiliates. Regular members of the Society may become members of the Gas Power Section by enrolling without payment of additional dues. To become an affiliate, an application blank, to be obtained from the office of the Secretary of the Society or of the section, must be filled in with the names of at least three endorsers who are either members, affiliates or persons of prominence, who will vouch for the standing of the applicant, and submitted to the Membership Committee of the Gas Power Section. The annual dues are \$5 and entitle the affiliate to receive The Journal of the Society, containing the proceedings of meetings, both of the Society and of the Gas Power Section.

GENERAL INFORMATION

STUDENT BRANCHES

The Council has recognized the requests of organizations of students in engineering schools to associate themselves with the Society as Student Branches, and 24 have made this affiliation. Each branch has an independent organization under its own by-laws, subject only to limitations set by the Council. To form such a section, a request may be presented in writing to the Council, signed by the dean of the school or college, and by a member of the Society who is also a member of the faculty. Blanks are obtainable from the Secretary. The annual dues of \$2 entitle all such affiliates to receive The Journal.

INSIGNIA

The seal of the Society, which appears on the cover of the Year Book, is based on the saying attributed to Archimedes, "Give me where I may stand and I will move the world."

Two forms of badges are issued to members, bearing the "good luck" emblem of a conventional clover leaf on which are the Society's initials. The badge for Honorary Members, Members and Associates is in dark blue enamel, with letters in bright gold. The Juniors' badge is of the same design, but with a crimson background.

JOHN FRITZ MEDAL

The John Fritz Medal, established in 1902, on the eightieth birthday of John Fritz, by professional associates and friends as a means of perpetuating the memory of his achievements in industrial progress, is awarded annually by the four national engineering societies—the American Society of Civil Engineers, the American Institute of Mining Engineers, The American Society of Mechanical Engineers, and the American Institute of Electrical Engineers—for notable scientific or industrial achievement, irrespective of nationality or sex, in accordance with the decision of a board composed of four members from each of these societies.

The medal was awarded in 1902 to John Fritz, Hon.Mem.Am. Soc.M.E., for notable scientific and industrial achievement; in 1905 to Lord Kelvin for his work in the development of cable telegraphy and other scientific accomplishments; in 1906 to George Westinghouse, Hon.Mem.Am.Soc.M.E., for the invention and development of the air brake; in 1907 to Alexander Graham Bell for the invention and development of the telephone; in 1908 to Thomas Alva Edison, Hon.Mem.Am.Soc.M.E., for the invention of the duplex and quadruple telegraph, the phonograph, the development of a commercially practical incandescent lamp, the development of a complete system of electric lighting, including dynamos, regulating devices, underground system protective devices and meters; in 1909 to Charles T. Porter, Hon.Mem.Am.Soc. M.E., for his work in the origination and development of the high-speed steam engine; in 1910 to Alfred Noble, Mem.Am.Soc. M.E., for notable achievements as a civil engineer; in 1911 to Sir Wm. H. White, Hon.Mem.Am.Soc.M.E., for notable achievements in marine engineering; and in 1912 to Capt. Robert W. Hunt, Past President Am.Soc.M.E., for his contributions to the early development of the Bessemer process.

HONORARY MEMBERS IN PERPETUITY

ALEXANDER LYMAN HOLLEY, Deceased Founder of the Society.

HENRY ROSSITER WORTHINGTON, Deceased Founder of the Society.

HONORARY MEMBERS

(In order of dates of election)

V. Dwelshauvers-Dery....	1886	John E. Sweet.....	1904
Gustave Eiffel.....	1889	Thomas Alva Edison.....	1904
Henri Léauté.....	1891	Andrew Carnegie.....	1907
Benj. Franklin Isherwood..	1894	John A. Brashear.....	1908
Sir Wm. Arrol.....	1895	John A. F. Aspinall.....	1911
George Westinghouse.....	1897	Carl Gustav Patrick de	
Wm. Cawthorne Unwin....	1898	Laval	1912
John Fritz.....	1900	Rudolph Diesel.....	1912
Sir Wm. H. White.....	1900	Anatole Mallet.....	1912
Sir Douglas Fox.....	1900	Oskar von Miller.....	1912

THE AMERICAN SOCIETY OF
MECHANICAL ENGINEERS

LIST OF MEMBERS

ARRANGED ALPHABETICALLY

ALL GRADES

THE JOURNAL OF THE
ROYAL ANTHROPOLOGICAL INSTITUTE

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ALPHABETICAL LIST OF MEMBERS ALL GRADES

- ABBOTT, Chas. Carroll (1905), Cons. Engr., Triumph Voting Mch. Co., and *for mail*, 237 Second St., Pittsfield, Mass.
- ABBOTT, Frederick Bancroft (1904), 419 Ninth St., Brooklyn, N. Y.
- ABBOTT, William L. (1891), Manager, 1907-1910; Ch. Operating Engr., Commonwealth Edison Co., 120 W. Adams St., and *for mail*, 4616 Beacon St., Chicago, Ill.
- ABELL, Harry Clinton (1900; 1902), Mech. Engr., care of Emerson McMillin & Co., 40 Wall St., New York, N. Y.
- ABERCROMBIE, James Henderson (1901), Mech. Supt., Clark Thread Co., Clark and Ogden Sts., Newark, N. J.
- ABORN, George P. (1889; 1892), Mgr., Blake & Knowles Steam Pump Wks., East Cambridge, and *for mail*, 50 Garrison Rd., Brookline, Mass.
- ABRAMS, Herbert T. (1901), Mgr. Pump and Calyx Drill Depts., Ingersoll-Rand Co., 11 Broadway, New York, N. Y., and *for mail*, 160 Cleveland St., Orange, N. J.
- ACKERMAN, Frank (Junior, 1912), Internatl. Motor Co., 532 Atlantic Ave., Brooklyn, N. Y.
- ACKERMAN, Wm. S. (1891; 1895; 1899), Cons. Engr., 704 Colt Bldg., Paterson, N. J.
- ADAM, William Joseph (1912), Mech. Engr., The Plimpton Press, and *for mail*, 23 Lincoln St., Norwood, Mass.
- ADAMS, Edward M. (1902), Ch. Engr., Quaker Oats Co., and *for mail*, 83 Charlotte St., Akron, O.
- ADAMS, Edward T. (1899), Pres., Wis. Eng. Co., Corliss, and 539 Terrace Ave., Milwaukee, Wis.
- ADAMS, Harry H. (1912), Engr., Ford, Bacon & Davis, 115 Broadway, New York, N. Y., and 268 N. Mountain Ave., Upper Montclair, N. J.
- ADAMS, Henry (1899), Cons. Engr., 855-859 Calvert Bldg., and 728 Reservoir St., Baltimore, Md.
- ADAMS, John (Junior, 1910), Estimator, Otis Elev. Co., New York, and *for mail*, 4093 Ferris St., Woodhaven, L. I., N. Y.
- ADAMS, Julius Leroy (1900), Genl. Supt. of Rys. and Ferries, Norfolk & Portsmouth Traction Co., Norfolk, Va.
- ADAMS, Kilburn E. (Junior, 1908), Mech. Engr., Boston & Albany R. R., Rm. 370, South Sta., Boston, and *for mail*, 1019 Washington St., Newtonville, Mass.
- ADAMS, Thomas D. (Junior, 1906), Werner & Pfleiderer, Saginaw, Mich., and *for mail*, Westport, Conn.
- ADAMS, Walter H. (Junior, 1908), Prof. Mech. Engrg., Throop Poly. Inst., Pasadena, Cal.
- ADAMS, William Jacques (Junior, 1912), Rundlett & Reynolds, 316 Main St., New Rochelle, and Boston Post Rd., Pelham Manor, N. Y.

- ADAMSON, Cecil F. (Junior, 1906), Cons. Mech., Elec. and Rubber Engr., 318 Hamilton Bldg., Akron, O.
- ADAMSON, Daniel (1901), Jos. Adamson & Co., and *for mail*, Longlands, Hyde, Cheshire, England.
- ADDICKS, Lawrence (1910), Supt., U. S. Metals Refining Co., Chrome, N. J.
- ADGATE, Frederick Whitney (1912), West. Mgr., The Foundation Co., 640 Rookery Bldg., Chicago, Ill.
- ADLER, Alphonse A. (1907; 1912), Instr. Mech. Drawing and Designing, Poly. Inst. of Brooklyn, 85 Livingston St., and 507 Third St., Brooklyn, N. Y.
- AGNER, Owen B. (Junior, 1912), 909 Wyandotte Bldg., Columbus, and Ottawa, O.
- AHARA, Edwin Hugh (1906), Genl. Supt., Dodge Mfg. Co., Mishawaka, Ind.
- AHLEN, William (1912), Ch. Engr., Duquesne Steel Wks., Carnegie Steel Co., Duquesne, Pa.
- AHLQVIST, Harald (1909), Asst. Mgr. B. C. Dept., Solvay Process Co., and 10 Brattle Rd., Syracuse, N. Y.
- AHRENS, Geo. Fred (1897), Pres. and Treas., The Ahrens Iron Wks. Co., 3323-3337 Colerain Ave., and *for mail*, 359 Thrall Ave., Cincinnati, O.
- AHRNKE, H. P. (Junior, 1902), Dairy Mchy. & Constr. Co., Derby, Conn.
- AIKEN, Charles W. (1903), Secy. and Treas., Houchin-Aiken Co., 113-123 53d St., and *for mail*, 2304 Newkirk Ave., Brooklyn, N. Y.
- AKERLIND, G. A. (1909), Cons. Engr., 619-620 City Hall Sq. Bldg., and 3618 Lexington St., Chicago, Ill.
- ALBERT, Calvin D. (1911), Asst. Prof. Mch. Design, Sibley College, Cornell Univ., and *for mail*, 114 Wait Ave., Ithaca, N. Y.
- ALBERT, Otto (1903), Ch. Draftsman, Shaw Elec. Crane Co., and *for mail*, 51 Sanford St., Muskegon, Mich.
- ALBRECHT, Otto (1884), Mech. Engr., Tindel Morris Co., Eddystone, Delaware Co., and 1405 N. 15th St., Philadelphia, Pa.
- ALBREE, Chester B. (1886; 1897), Pres. and Ch. Engr., Chester B. Albree Iron Wks. Co., 1115 Metropolitan St., N. S., and 1116 Western Ave., N. S., Pittsburgh, Pa.
- ALBRIDGE, Frederick Royal (1911), Ch. Draftsman, Bessemer & Lake Erie R. R., and *for mail*, 313 Main St., Greenville, Pa.
- ALBRIGHT, H. Fleetwood (1903), Genl. Supt., West. Elec. Co., Hawthorne Sta., Chicago, Ill.
- ALDCORN, Thomas (Associate, 1903), Genl. East. Sales Mgr., Chicago Pneu. Tool Co., 50 Church St., New York, N. Y., and 35 King Ave., Highwood Park, Weehawken, N. J.
- ALDEN, Frederick Arthur (Junior, 1912), Asst. Mech. Supt., Wm. Filene's Sons Co., Washington, Summer and Hawley Sts., Boston, and *for mail*, 60 Gorham St., Cambridge, Mass.
- ALDEN, George I. (1880), Vice-President, 1891-1893; Pres., Norton Co., and Pres. and Genl. Mgr., Norton Grinding Co., and *for mail*, 48 Queen St., Worcester, Mass.

- ALDEN, Herbert W. (1908), Ch. Engr., Timken-Detroit Axle Co., Clark Ave., Detroit, Mich.
- ALDEN, John Douglas (1912), Gas Engr., Asst. Supt., The United Gas Improvement Co., 83 Center St., Waterbury, Conn.
- ALDRICH, Chester S. (Junior, 1909), Treas., Gray-Aldrich Co., Inc., 33 Commercial Wharf, Boston, and 47 Mt. Bowdoin Terrace, Dorchester, Mass.
- ALDRICH, Herbert Lincoln (Associate, 1900), Pres. and Treas., Aldrich Publishing Co., Publishers of International Marine Engineering, also The Boiler Maker, 17 Battery Pl., and Hotel San Remo, Central Park W. and 74th St., New York, N. Y.
- ALDRICH, J. Guy (Junior, 1903), present address unknown.
- ALDRICH, John Gladding (1901), V. P. and Genl. Mgr., N. E. Butt Co., and 223 Bowen St., Providence, R. I.
- ALDRICH, William Sleeper (1892), Life Member; U. S. Reclamation Service, Powell, Wyo.
- ALEXANDER, Chas. A. (1899; 1905), Pres. and Treas., The Alexander, Shumay & Utz Co., 16 State St., and *for mail*, 64 Cornell St., Rochester, N. Y.
- ALEXANDER, Edward E. (Associate, 1908), Ch. Draftsman, The Taylor-Wharton Iron & Steel Co., High Bridge, N. J.
- ALEXANDER, Harry (1895; 1899; 1901), Elec. and Mech. Contr. Engr., Astor Court Bldg., 18-20 W. 34th St., New York, and Great Neck, N. Y.
- ALEXANDER, Louis Albion (1901), Genl. Stores Keeper, Genl. Supt.'s Office, Am. Brass Co., and *for mail*, P. O. Box 514, Waterbury, Conn.
- ALEXANDER, Ludwell Brooke (1905; 1911), Ch. of Sales Dept., Bosch Magneto Co., 223 W. 46th St., and 616 W. 116th St., New York, N. Y.
- ALEXANDER, Magnus W. (1906), Genl. Elec. Co., West Lynn, Mass.
- ALFORD, Leon Pratt (1900; 1908), Editor, American Machinist, 505 Pearl St., New York, N. Y., and 45 Irving St., Montclair, N. J.
- ALGER, Harley C. (Junior, 1908), Mgr. Weigher Dept., The Ken-nicott Co., and *for mail*, 1334 N. Park Ave., Chicago Heights, Ill.
- ALLAN, Wm. T. (Associate, 1906), Andrew Allan & Sons, 486 Greenwich St., New York, N. Y., and 728 Ocean Ave., Jersey City, N. J.
- ALLEN, Albert Mark (1903; 1908), Cons. Engr., 1900 Euclid Ave., and 1503 E. 118th St., Cleveland, O.
- ALLEN, Benj. T. (1903), Ch. Engr., Harrisburg Fdy. & Mch. Wks., and *for mail*, 218 S. 13th St., Harrisburg, Pa.
- ALLEN, Charles M. (1901; 1903), Prof. Hyd. Engrg., Worcester Poly. Inst., and 10 Dean St., Worcester, Mass.
- ALLEN, Francis B. (1880), V. P., Hartford Steam Boiler Inspc. & Ins. Co., and 56 Prospect St., Hartford, Conn.

- ALLEN, George L., Jr. (Junior, 1906), 25 Westmoreland Pl., St. Louis, Mo.
- ALLEN, Henry Asa (1900), Cons. Engr., City Hall, and 917 Galt Ave., Chicago, Ill.
- ALLEN, John L. (1911), V. P. and Genl. Mgr., Hastings Motor Shaft Co., and 478 Van Buren St., Jackson, Mich.
- ALLEN, John Robins (1894; 1903), Prof. Mech. Engrg., Univ. of Mich., 221 New Engrg. Bldg., Ann Arbor, Mich.
- ALLEN, Walter C. (Junior, 1905), Genl. Mgr., Yale & Towne Mfg. Co., 9 Murray St., New York, N. Y., and 181 Greyrock Pl., Stamford, Conn.; also, V. P., Canadian Yale & Towne Ltd., St. Catharines, Ont., Canada.
- ALLEN, William Duncan (1911), Cons. Engr., Htg. and Vent., 605 Peoples Savings Bank Bldg., Seattle, Wash.
- ALLEN, W. Harwell (Junior, 1911), Allen-Scales Engrg. Co., 930 Stahlman Bldg., and 114 17th Ave., N., Nashville, Tenn.
- ALLISON, John Franklin (Junior, 1910), Mech. Engrg. Dept., Univ. of Pa., Philadelphia, Pa., and P. O. Box 110, Riverton, N. J.
- ALLISON, Robert (1884), Mech. Engr., Ret., Port Carbon, Pa.
- ALLYN, Robert S. (Associate, 1909), Counsel and Expt. in Pat. Causes, 16 Exch. Pl., New York, and 24 Irving Pl., Brooklyn, N. Y.
- ALMIRALL, Juan A. (1892; 1904), Htg. and Vent. Engr., Dominick and Clarke Sts., New York, and 97 McDonough St., Brooklyn, N. Y.
- ALMQUIST, Karl (1911), Ch. Draftsman, A. S. Cameron Steam Pump Wks., Phillipsburg, N. J., and 523 High St., Easton, Pa.
- ALMY, Darwin (1893), Pres., Almy Water Tube Boiler Co., 178-184 Allen Ave., Providence, R. I.
- ALSBERG, Julius (Junior, 1905), Engr., Colgate & Co., Jersey City, N. J., and *for mail*, 56 W. 95th St., New York, N. Y.
- ALTA, Lucas Nicholas (1896), Mech. Engr. and Member of Firm, L. N. Alta & Co., 48 Binnenkant, Amsterdam, and *for mail*, Breedeweg, 26, Watergraafsmeer, Holland.
- ALVORD, C. H. (Associate, 1903), V. P. and Genl. Mgr., The Hendey Mch. Co., and 115 Litchfield St., Torrington, Conn.
- AMES, Geo. Edgar (1904), Mech. Supt., Lawrence Mfg. Co., and 119 Hall St., Lowell, Mass.
- AMES, Joseph H. (1898), Ch. Engr., Am. Car & Fdy. Co., 414 Ry. Exch., and 4656 Lake Ave., Chicago, Ill.
- AMSLER, Walter O. (Junior, 1897), Contr. Engr., Wabash Bldg., Pittsburgh, and 129 Lincoln Ave., Edgewood Park, Pa.
- ANCONA, John F. (1904; 1912), Mech. Engr., Eastman Kodak Co., Kodak Park Wks., and *for mail*, 190 Birr St., Rochester, N. Y.
- ANDERSEN, Johan Marinus (1908), Pres., Albert & J. M. Anderson Mfg. Co., 289 A St., Boston, and 89 Evans St., Dorchester Center, Mass.

- ANDERSON, Emanuel (Associate, 1907), Sargent & Lundy, and *for mail*, 5301 Kenmore Ave., Chicago, Ill.
- ANDERSON, Frederick Paul (1908), Prof. Mech. Engrg. and Dir. College of Mech. and Elec. Engrg., State Univ. of Ky., Box 294, and 147 Kentucky Ave., Lexington, Ky.
- ANDERSON, Harold Bentley (1903; 1911), Ch. Engr., The Winton Motor Carriage Co., Cleveland, and *for mail*, 10,117 Clifton Blvd., Lakewood, O.
- ANDERSON, Harry Warfield (Associate, 1907), Dist. Sales Mgr., Am. Motors Co., 5 E. 3d St., Atlanta, Ga.
- ANDERSON, Henry Clay (1912), Prof. Mech. Engrg., Univ. of Mich., Engrg. Bldg., Ann Arbor, Mich.
- ANDERSON, Howard L. (Junior, 1907), M. M., Vandergrift Wks., Am. Sheet & Tin Plate Co., Vandergrift, Pa.
- ANDERSON, Jas. C. (Junior, 1893), Cons. and Contr. Engr., 153 Newell Ave., Rutherford, N. J.
- ANDERSON, Leslie Douglass (Associate, 1906), Supt., U. S. Smelting Co., Midvale, Utah.
- ANDERSON, Robert (1907), Ch. Engr., Proctor & Gamble Co., Ivorydale, and *for mail*, Vermont Ave., Sta. R., Cincinnati, O.
- ANDERSON, Robt. Marshall (1898), Boyce, La.
- ANDREI, Camillo (Junior, 1911), Società Nazionale dei Radiatori, Borgo S. Giovanni, Brescia, Italy.
- ANDREW, James D. (1904), Boston Elev. Ry. Co., 439 Albany St., Boston, and 16 South St., Brighton, Mass.
- ANDREWS, Jacob R. (1906), Pres., Hyde Windlass Co., Bath, Me.
- ANDREWS, William Johnston (Junior, 1898), Mech. Engr., P. O. Box 231, and 105 E. North St., Raleigh, N. C.
- ANDRIX, Earl Russel (Junior, 1909), Boiler Rm. Foreman, Columbus Ry. & Light Co., Spring St. Power Sta., and *for mail*, 828 Bellows Ave., Columbus, O.
- ANGSTROM, Carl (1883), Cons. Engr., Skepparegatan 5, Stockholm, Sweden.
- ANGSTROM, C. Jonas (1908), 625 Clyde St., Pittsburgh, Pa.
- ANGUS, Joseph Johnson (1904), Mech. Engr., 3226 Carroll Ave., Chicago, Ill.
- ANGUS, Robert (1891), Cons. Engr., 705 Confederation Life Bldg., Toronto, and 514 William St., London, Ont., Canada.
- ANGUS, Robert W. (1901; 1908), Prof. Mech. Engrg., Faculty of Applied Science and Engrg., Univ. of Toronto, Toronto, Ont., Canada.
- ANNAN, Arthur H. (1909), Supt., R. I. Tool Co., and 27 Larch St., Providence, R. I.
- ANTHONY, Gardner C. (1884), Dean Engrg. Sch., Tufts College, Tufts College P. O., Mass.
- ANTISELL, Frank Linden (1905), Asst. Supt., Raritan Copper Wks., and 147 Water St., Perth Amboy, N. J.
- APPLETON, Chas. B. (1894), Mech. Engr., Netherlands Rd., Brookline, Mass.

- APPLETON, Henry W. (Junior, 1906), Mech. Supt., Passaic Print Wks., and *for mail*, 243 Van Houten Ave., Passaic, N. J.
- APPLETON, Wm. Day (Junior, 1905), Supt., The Guanajuato Power & Elec. Co., Apartado 23, Zamora, Michoacan, Mex.
- APPS, Chas. Henry (1899), Am. Loco. Co., 30 Church St., New York, N. Y.
- ARBOGAST, Victor R. (1909), Wks. Mgr., Natl. Radiator Gesellschaft, Postfach 95, and Hotel Central, Wiener-Neustadt, Austria.
- ARCHER, Edward R. (1890), Ch. Engr., Tredegar Co., and *for mail*, 303 W. Franklin St., Richmond, Va.
- ARD, Charles Edgar (1908), 1902 Am. Trust Bldg., Birmingham, Ala.
- ARMES, George A. (1912), Engr-in-Ch., Union Iron Wks. Co., and *for mail*, 1331 Fourth Ave., San Francisco, Cal.
- ARMSTEAD, Frank C. (1906), Engr. Stoker Dept., Westinghouse Mch. Co., 165 Broadway, New York, and *for mail*, 1071 E. 17th St., Brooklyn, N. Y.
- ARMSTRONG, E. J. (1886; 1891), Engr., Ball Eng. Co., and *for mail*, 954 W. 9th St., Erie, Pa.
- ARMSTRONG, Francis J. (Junior, 1912), Cons. Engr., 1513 Singer Bldg., 149 Broadway, New York, N. Y.
- ARMSTRONG, Frank Hall (1908), Mech. Engr., Penn Iron Min. Co., Republic Iron Co., Vulcan, Mich.
- ARMSTRONG, Walter J. (Junior, 1907), Mech. Engr., Jeffrey Mfg. Co., and *for mail*, 900 Neil Ave., Columbus, O.
- ARMSTRONG, Wm. M. (Junior, 1894), Corrugated Bar Co., 402 Mutual Life Bldg., Buffalo, N. Y.
- ARNOLD, Anthony Brown (1911), Dist. Engr., The Am. Agri. Chem. Co., Carteret, and *for mail*, 628 Summit Ave., Westfield, N. J.
- ARNOLD, Edwin E. (1900; 1906), Cons. Engr., A. O. Smith Co., and 851 Marietta Ave., Milwaukee, Wis.
- ARNOLD, George, Jr. (1904), Cleveland Frog & Crossing Co., and *for mail*, 8217 Brookline Ave., Cleveland, O.
- ARNOLD, G. L. H. (1899), Mech. Engr., 37 Wall St., New York, N. Y., and *for mail*, Box 1, Stamford, Conn.
- ARNOLD, Otto, Jr. (Junior, 1905), Mgr., Friedrich Stolzenberg & Co., G. m. b. H., Berlin, Reinickendorf-West, Germany.
- ARNOLD, Walter S. (1901), M. M. and Ch. Engr., Grosvenordale Co., and P. O. Box 106, Grosvenordale, Conn.
- ARNOTT, Robert Fleming (Associate, 1909), Cons. Engr., 95-97 Liberty St., New York, N. Y., and 25 Glenwood Rd., Upper Montclair, N. J.
- AROZARENA, Rafael M. de (1885), Life Member; Engr. and Contr., 3a Calle de las Estaciones No. 44, City of Mexico, Mex.
- ARROL, Sir Wm. (Honorary, 1895), Engr., Dalmarnock Iron Wks., 85 Preston St., Glasgow, and Seafeld, Ayr, Scotland.

- ARTAUD, Theodore P. (Associate, 1907), Supt., Hudson & Manhattan R. R. Co.'s Terminal, Pur. Agt., Hudson & Manhattan R. R. Co., 30 Church St., and The Aphorp Apt., 79th St. and Broadway, New York, N. Y.
- ARTER, Wilbur D. (Junior, 1911), Asst. Engr., N. Y. C. & H. R. R. Co., New York, and *for mail*, 2493 Valentine Ave., Fordham, New York, N. Y.
- ASHLEY, Edward E., Jr. (Junior, 1910), Cons. Engr., 417 Fifth Ave., New York, N. Y.
- ASHLEY, Frank M. (Junior, 1894), Pat. Atty. and Cons. Engr., Tribune Bldg., 154 Nassau St., New York, and 310 Ditmas Ave., Brooklyn, N. Y.
- ASHTON, Albert Carter (1901), Treas., Ashton Valve Co., 271 Franklin St., Boston, and *for mail*, 33 Columbus Ave., Somerville, Mass.
- ASHTON, Walter S. (1908), Ch. Engr., St. Louis Brewing Asso., and *for mail*, 1727 Cora Ave., St. Louis, Mo.
- ASHWORTH, Daniel (1885), Life Member; Cons. Engr., 67 W. Ridge Ave., Crafton, Pa.
- ASPINALL, John A. F. (Honorary, 1911), Genl. Mgr., Lancashire & Yorkshire Ry., Hunts Bank, Manchester, and *for mail*, Gledhill, Mossley Hill Drive, Sefton Park, Liverpool, England.
- ASTROM, Carl Pontus (1912), Ch. Engr., M. H. Treadwell Co., 140 Cedar St., New York, N. Y., and 14 Chestnut St., East Orange, N. J.
- ASTROM, John (1900; 1903), Mech. Engr., 611 W. Wayne St., Fort Wayne, Ind.
- ATKINS, David Fowler (1907), 727 Custom House Bldg., New York, N. Y.
- ATKINS, Harold B. (1903), Cons. Engr. and Certified Pub. Acct., 90 West St., and *for mail*, 527 W. 121st St., New York, N. Y.
- ATTERBURY, Wm. Wallace (1894), V. P. in Charge of Operation, Pa. R. R. Co., Broad St. Sta., Philadelphia, and Radnor, Pa.
- ATWOOD, Geo. D. (Junior, 1903), Pres., George D. Atwood Co., 149 Broadway, and Pres., Uehling Sales Co., 95 Liberty St., New York, and 514 E. 16th St., Brooklyn, N. Y.
- ATWOOD, William S. (1908), Ch. Engr., Canadian Car & Fdy. Co., Ltd., and Canadian Steel Foundries, Ltd., Transportation Bldg., and *for mail*, 225 Metcalf Ave., Montreal, P. Q., Canada.
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- AUSTIN, Adolph Odell (Junior, 1905), Ch. Draftsman, The Lassen Ice Mch. Co., 5853 Evanston Ave., and 5873 Southport Ave., Chicago, Ill.
- AUSTIN, William F. (1905), Supt., Eddystone Plant, Belmont Iron Wks., Eddystone, Pa.

- AUSTIN, William S. (1902; 1906), Supv. Engr., Kodak Park Wks., Eastman Kodak Co., and 205 Driving Park Ave., Rochester, N. Y.
- AUSTROM, Charles A. (1912), Asst. Ch. Engr., The Travelers Ins. Co. and The Travelers Indemnity Co., and Dillon Court, Hartford, Conn.
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- AVERILL, E. A. (Associate, 1912), Managing Editor, American Engineer, 140 Nassau St., New York, N. Y., and 341 Seneca Ave., Mt. Vernon, N. Y.
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- AYERS, Norwood B. (1908), Mech. Engr., Champion Coated Paper Co., and 620 Main St., Hamilton, O.
- AYLSWORTH, Joseph W. (Junior, 1907), Asst. Engr., Westinghouse, Church, Kerr & Co., 10 Bridge St., and 49 E. 30th St., New York, N. Y.
- BABBITT, Edward F. (1909), Engr. with F. L. Packard, and *for mail*, 406 S. Ohio Ave., Columbus, O.
- BABCOCK, Stephen E. (1881), Mech. and Civ. Engr., 55 Mann Bldg., and 131 Oneida St., Utica, N. Y.
- BACHELDER, Joseph Elmer (Junior, 1905), Mgr. Steam Pump Mfg. Dept., Fairbanks, Morse Mfg. Co., and *for mail*, 816 Park Ave., Beloit, Wis.
- BACHMAN, Robert A. (1911), V. P. and Genl. Mgr., Edison Storage Battery Co., Orange, and 100 Watson Ave., West Orange, N. J.
- BACKLIN, Axel F. (1902), Asst. to Ch. Engr., Am. Steel & Wire Co., and 17 Holden St., Worcester, Mass.
- BACON, Charles James (1905; 1907), Steam Engr., Ill. Steel Co., South Chicago, and 7334 Palmer Ave., Chicago, Ill.
- BACON, Earle C. (1885; 1886), Cons. and Contr. Engr., Havemeyer Bldg., 26 Cortlandt St., New York, N. Y.
- BACON, Frederick T. H. (1908), Cons. Engr., Ewing, Bacon & Henry, 30 Church St., and 344 W. 72d St., New York, N. Y.
- BACON, George W. (1898; 1899), Mech. Engr., Member of Firm, Ford, Bacon & Davis, 115 Broadway, and 23 W. 67th St., New York, N. Y.
- BACON, John Lord (1899; 1909), 1101 Am. Natl. Bank Bldg., San Diego, Cal.
- BAEHR, William Alfred (1903), Cons. Engr., Peoples Gas Bldg., Chicago, Ill.
- BAENDER, Fred. Geo. (Junior, 1909), Fife, Ore.
- BAGG, Samuel F. (1896), Dist. Agt., The Fidelity & Casualty Co., Burdett Bldg., and 96 Fourth St., Troy, N. Y.
- BAGGALEY, Ralph (Associate, 1891), Life Associate; Metallurgist and Miner, Pres., Pyritic Conversion Smelting Co., 1 Woodland Rd., E. E., Pittsburgh, Pa.

- BAILEY, Alex. D. (Junior, 1910), Asst. Ch. Engr., Stas. 2 and 3, Commonwealth Edison Co., Chicago, and *for mail*, 21 Elmwood Ave., La Grange, Ill.
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- BAILEY, Ervin G. (1903; 1912), Mech. Engr. and Partner, Fuel Testing Co., 220 Devonshire St., Boston, and 1057 Walnut St., Newton Highlands, Mass.
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- BAILEY, Harry E. B. (1912), Engr. of Wks., Am. Optical Co., and *for mail*, 37 Everett St., Southbridge, Mass.
- BAILEY, Hazil Harding (Junior, 1910), Engr., E. W. Clark & Co., 910 Wyandotte Bldg., Columbus, O., and *for mail*, 1719 Faraon St., St. Joseph, Mo.
- BAILEY, H. Morell (Junior, 1909), Safety Inspr., Carnegie Steel Co., and *for mail*, Duquesne, Allegheny Co., Pa.
- BAILEY, T. S. (1896; 1905), Pacific Coast Mgr., Elec. Boat Co., Seattle, Wash.
- BAILEY, William J. (Junior, 1910), Mech. Engr., United Coal Co., Pa. Bldg., and *for mail*, 5831 Springfield Ave., Philadelphia, Pa.
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- BAKER, Charles H. (Junior, 1903), Ch. Engr. Tunnel Power Sta., Berkshire St. R. R., Adams, and 12 Spring St., North Adams, Mass.
- BAKER, Charles Whiting (1893), Vice-President, 1909-1911; Editor-in-Chief, Engineering News, 505 Pearl St., New York, N. Y., and 20 S. Mountain Ave., Montclair, N. J.
- BAKER, Dickerson G. (1905), Dir. Genl., Fabrication, Carels Frères, Ghent, Belgium.
- BAKER, Frank D. (1893), Ch. Engr. Colo. Dept., Am. Smelting & Refining Co., 830 First Natl. Bank Bldg., and *for mail*, 3221 Franklin St., Denver, Colo.
- BAKER, Fred L. (1912), Mech. Engr., Chicago Steel Car Co., Chicago, and *for mail*, 15,332 Vine Ave., Harvey, Ill.
- BAKER, John C. W. (1904), M. M., U. S. Rubber Reclaiming Plant, and *for mail*, 153 Millville Ave., Naugatuck, Conn.
- BAKER, William E. (1902), W. E. Baker & Co., 105 W. 40th St., New York, N. Y.
- BALDWIN, Abram T. (1899; 1902), Life Member; V. P. and Treas., Precision Instrument Co., 49 Larned St. W., Detroit, and *for mail*, Washington Rd. and Maumee Blvd., Grosse Pointe, Mich.
- BALDWIN, Allen Welling (Junior, 1912), Engrg. Dept., The Deane Steam Pump Co., and *for mail*, P. O. Box 509, Holyoke, Mass.
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- BALDWIN, C. Kemble (1905), Ch. Engr., Robins Conveying Belt Co., 1070 Old Colony Bldg., Chicago, Ill.
- BALDWIN, Oscar H. (1889), London Dist. Mgr., British Westinghouse Elec. & Mfg. Co., Ltd., London, England.
- BALDWIN, Wm. J. (1882), Cons. Engr., 501 World Bldg., New York, and 151 Halsey St., Brooklyn, N. Y.
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- BALL, Bert Chas. (1898; 1904), V. P. and Genl. Mgr., Willamette Iron & Steel Wks., and 482 Harrison St., Portland, Ore.
- BALL, Frank H. (1883), Manager, 1888-1891; Vice-President, 1894-1896; V. P. and Genl. Mgr., Am. Eng. Co., Bound Brook, and *for mail*, Cedarcroft, 1003 Park Ave., Plainfield, N. J.
- BALL, Frederick Ossian (1901; 1907), Asst. Genl. Mgr., Am. Eng. Co., Bound Brook, and *for mail*, 44 Washington Ave., Plainfield, N. J.
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- BALL, Walter Seaver (1900), United Shoe Mch. Co., and *for mail*, 32 Pickett St., Beverly, Mass.
- BALLARD, Frederick W. (1907), Engr. of Constr., City of Cleveland Municipal Elec. Light Plant, 319 City Hall, Cleveland, O.
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- BANCEL, Paul August (Junior, 1912), Mech. Engr., The Geo. H. Gibson Co., 1119 Tribune Bldg., New York, N. Y.
- BANCROFT, Charles Foster (1911), V. P., Manchester Elec. Co., Elec. Engr., Mass. Elec. Cos., Supt. M. P. and Mch., Bay State St. Ry. Co., 84 State St., and 159 Bay State Rd., Boston, Mass.
- BANCROFT, George Arthur (Junior, 1910), Exper. Dept., Tractor Wks., Internatl. Harvester Co., and *for mail*, 2335 Lawn-dale Ave., Chicago, Ill.
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- BANCROFT, Wilfred (1912), Sales Mgr., Lanston Monotype Mch. Co., 24th and Locust Sts., Philadelphia, Pa.

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- BANNISTER, John C. (1902), Mgr. Kewanee Wks., Natl. Tube Co., and 519 S. Tremont St., Kewanee, Ill.
- BANNON, Leo Matthew (Junior, 1908), Ch. Engr. and Electrician, Ware Shoals Mfg. Co., Ware Shoals, S. C.
- BANTA, Earle Jackson (1907), present address unknown.
- BAQUET, Camille, Jr. (1911), Supt., Valley Iron Wks., Box 34, Williamsport, Pa.
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- BARBIERI, Cesare (1908), Cons. Mech. Engr., Old Colony Bldg., Dearborn and Van Buren Sts., and 1429 Dearborn Ave., Chicago, Ill.
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- BARBOUR, George Hurlbut (1912), Asst. Ch. Mech. Engr., Carnegie Steel Co., Carnegie Bldg., Pittsburgh, Pa.
- BARBOZA, Arthur S. (1906), Rua Senador Pompeu, 268, E. F. C. B., Rio de Janeiro, Brazil, S. A.
- BARKER, Fred P. (Associate, 1907), Insp., U. S. Engr. Office, and *for mail*, 511 West Ave., Buffalo, N. Y.
- BARKER, Perry (Junior, 1909), Fuel Engr., Arthur D. Little, Inc., 93 Broad St., Boston, Mass.
- BARKLEY, Matthew B. (Junior, 1901), V. P., Cameron & Barkley Co., Genl. Asbestos & Rubber Co., 160 Meeting St., and 137 Rutledge Ave., Charleston, S. C.
- BARNABY, Chas. W. (1884), Cons. Engr., 257 Hamilton Ave., New Brighton, S. I., N. Y.
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- BARNES, E. Austin (1905; 1907), Engr. of Tests, Semet-Solvay Co., and Sedgwick Farm, Syracuse, N. Y.
- BARNES, Howel Henry, Jr. (1910), Dist. Engr., Genl. Elec. Co., 30 Church St., and *for mail*, 32 W. 40th St., New York, N. Y.
- BARNES, Stuart Gray (1899; 1902), Engr., Solvay Process Co., and 310 West Blvd., Detroit, Mich.
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- BARNES, William O. (1908), Mech. Engr., Iver-Johnson Arms & Cycle Wks., and *for mail*, 28 Winter St., Fitchburg, Mass.

- BARNEY, E. E. (1912), Supt., Remington Typewriter Wks., Ilion, N. Y.
- BARNUM, Geo. S. (1887), V. P., Bigelow Co., and 237 E. Rock Rd., New Haven, Conn.
- BARNUM, Starr H., 2d (Junior, 1912), Secy., The Bigelow Co., New Haven, Conn.
- BARR, Harry P. (Junior, 1889), 157 N. Walnut St., East Orange, N. J.
- BARR, John H. (1889), Cons. Engr., Union Typewriter Co., 293 Broadway, and Euclid Hall, 2345 Broadway, New York, N. Y.
- BARR, William Henry (Associate, 1911), Genl. Mgr., Lumen Bearing Co., and 1155 Sycamore St., Buffalo, N. Y.
- BARRATT, Edgar Grant (1888), Pres., Union Bag and Paper Co., 17 Battery Pl., New York, N. Y., and *for mail*, 133 Harrison St., East Orange, N. J.
- BARRE, Herbert A. (1912), Mech. and Elec. Engr., Pacific Light & Power Corp., and *for mail*, 225 E. 3d St., Los Angeles, Cal.
- BARRETT, Dwight Orion (Junior, 1912), Heer Eng. Co., and *for mail*, 1753 11th St., Portsmouth, O.
- BARRETT, Walter A. (Junior, 1906), Sales Engr., The Bass Fdy. & Mch. Co., and *for mail*, 905 Wildwood Ave., Fort Wayne, Ind.
- BARRON, Claude M. (Junior, 1910), Cons. Engr., R. W. Cameron & Co., 23 S. William St., New York, N. Y., and 2009 Forest Ave., St. Louis, Mo.
- BARROWS, Lee Earl (1908; 1912), Asst. Cons. Engr., The Texas Co., Houston, Tex., and Box 427, Olean, N. Y.
- BARRUS, Geo. H. (1883), Vice-President, 1905-1906; Expt. and Cons. Steam Engr., 301 Pemberton Bldg., 12-20 Pemberton Sq., Boston, Mass.
- BARSTOW, Francis Loring (1905; 1911), Engr., Leitch & Barstow, Engrs., 172 Main St., and 691 State St., Springfield, Mass.
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- BARTLETT, Dwight Kellogg (1910), Genl. Mgr. and Asst. Treas., Builders Iron Fdy., 9 Coddling St., Providence, and 1301 Narragansett Blvd., Edgewood, R. I.
- BARTLETT, George M. (1911), Mech. Engr., Diamond Chain & Mfg. Co., and *for mail*, 2609 N. Delaware St., Indianapolis, Ind.
- BARTLETT, Henry (1897), Genl. Mech. Supt., Boston & Me. R. R., N. Sta., Boston, and *for mail*, 51 Highland St., Cambridge, Mass.
- BARTOL, Geo. (1886), Pres., The Otis Steel Co., Ltd., and 1832 Crawford Rd., Cleveland, O.
- BARTON, Henry L. (1903), Asst. Dir. of Production, Genl. Motors Co., cor. Brush and Congress Sts., and 197 Parker Ave., Detroit, Mich.

- BASFORD, Geo. M. (1889; 1891), Manager, 1905-1909; Asst. to Pres., Am. Loco. Co., 30 Church St., New York, and 134 Primrose Ave., Mt. Vernon, N. Y.
- BASINGER, James G. (1907), Civ. Engr., 52 Broadway, New York, N. Y.
- BASKERVILL, George Booth, Jr. (1912), Baskervill & Co., Title Guarantee Bldg., and 1616 Ave. J, Birmingham, Ala.
- BASSHOR, Chas. Hazeltine (1908), V. P. and Genl. Mgr., Thomas C. Basshor Co., 28 Light St., Baltimore, Md.
- BATCHELDER, Asa Fred (1903), Designing Engr. Ry. Engrg. Dept., Genl. Elec. Co., and R. F. D. 2, Schenectady, N. Y.
- BATEMAN, Edward L. (Associate, 1897), Mgr. for South Africa Allis-Chalmers Co., P. O. Box 6659, Johannesburg, Transvaal, S. A.
- BATEMAN, George Wm. (Junior, 1909), Asst. to Secy., and Wks. Mgr., Sullivan Mchy. Co., and *for mail*, 108 Pleasant St., Claremont, N. H.
- BATES, Adelmer M. (1912), Pres., Bates Valve Bag Co., 11-17 S. Desplaines St., Chicago, Ill.
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- BATES, Daniel Moore (1912), Agt., Lewiston Bleachery & Dye Wks., and Pine and Webster Sts., Lewiston, Me.
- BATES, Edward Carrington (1899), 122 Marlboro St., Boston, Mass.
- BATES, Edward P. (1891), Life Member; Prin., 228 W. Water St., Syracuse, N. Y.
- BATHGATE, Owen Hamill (1912), Wks. Steam Engr., Westinghouse Elec. & Mfg. Co., East Pittsburgh, and 1213 Center St., Wilkinsburg, Pa.
- BATT, William Lorraine (Junior, 1911), Ry. Engr., The Hess-Bright Mfg. Co., Front St. and Erie Ave., Philadelphia, and *for mail*, 256 Mather Ave., Jenkintown, Pa.
- BATTEN, Percy H. (1901; 1910), Supt. West. Foundries, Am. Brake Shoe & Fdy. Co., and *for mail*, 121 E. Oak St., Chicago, Ill.
- BAUER, Chas. L. (1900; 1901), Pres., The Bauer Bros. Co., and 1215 E. High St., Springfield, O.
- BAUER, Thomas (1912), Pres. and Genl. Mgr., Lafayette Box Board & Paper Co., Lafayette, Ind.
- BAUM, Frank G. (1906), Cons. Engr., Ch. Engr. Hydroelectric Dept., Pacific Gas & Elec. Co., 1404 Chronicle Bldg., San Francisco, Cal.
- BAUM, Robert Stanton (Junior, 1912), Supt., The Heer Eng. Co., Portsmouth, O.
- BAUSCH, Carl L. (Junior, 1911), Asst. Mech. Supt., Bausch & Lomb Optical Co., 635 St. Paul St., and 121 N. Fitzhugh St., Rochester, N. Y.

- BAUSCH, Frederick E. (1904), Mgr., The Hooven, Owens, Rentschler Co., 1216-1217 Chemical Bldg., and 6139 Berlin Ave., St. Louis, Mo.
- BAUSH, William H. (1904), Mech. Engr. and in Charge Sales, Natl. Equip. Co., and 419 Sumner Ave., Springfield, Mass.
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- BAYLIS, Arthur Raymond (1905; 1906), Ch. Draftsman for H. G. Stott, 59th St. Power House, I. R. T. Co., New York, and *for mail*, 1815 Ave. K, Flatbush, Brooklyn, N. Y.
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- BAYNE, George Henry (1911), Mech. Engr., Pa. Coal & Coke Corp., 17 Battery Pl., and 561 W. 141st St., New York, N. Y.
- BEACH, Charles S. (Junior, 1885), Designer and Machinist, 745 Main St., Bennington, Vt.
- BEACH, Harold K. (Junior, 1904), Asst Supvr. of Power Plants, N. Y., N. H. & H. R. R. R., and *for mail*, 296 Norton St., New Haven, Conn.
- BEADENKOPF, George (1912), Ch. Engr. Gas Div., Consldt. Gas, Elec. Light & Power Co. of Baltimore, Lexington and Liberty Sts., Baltimore, and Glyndon, Md.
- BEALL, Frank F. (Junior, 1902), Factory Mgr., Packard Motor Car Co., and 59 Hendrie Ave., Detroit, Mich.
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- BEAN, Irving McC. (Junior, 1903), Pres., Milwaukee Boiler Co., 629 Wells Bldg., and 4 Prospect Ave., Milwaukee, Wis.
- BEAN, William Lloyd (1912), Mech. Rep., Jacobs-Shupert U. S. Firebox Co., 339 Railway Exch., Chicago, Ill.
- BEARDSLEY, Arthur (1883), Life Member; Emeritus Prof. Engrg., Swarthmore College, Swarthmore, Del. Co., Pa.
- BEATIE, Cecil Emile (Junior, 1912), Mech. Engr., Associated Oil Co., 310 Wells Fargo Bldg., San Francisco, Cal.
- BECHTEL, August L. (Junior, 1911), Mech. Engr., The Cleveland Punch & Shear Wks. Co., and *for mail*, 10,531 Lee Ave., N. E., Cleveland, O.
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- BECK, James Doughty (1906), Supt. Constr., Shakespeare Iron Wks., 913 Girod St., and *for mail*, 2331 Constance St., New Orleans, La.
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- BEECHER, Henry Ward (Junior, 1908), Mgr. Seattle Office, Chas. C. Moore & Co., 618 Mutual Life Bldg., and The Hillcrest, 17th and E. Howell Sts., Seattle, Wash.
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- BEHN, Carl (1903), Buffalo Refrig. Mch. Co., 126 Liberty St., New York, N. Y., and 24 Nassau Pl., East Orange, N. J.
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- BEHREND, Ernst Richard (1900), Pres. and Genl. Mgr., Hamermill Paper Co., Erie, Pa.
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- BELL, John Everett (Associate, 1903), Mech. Engr., Babcock & Wilcox Co., 85 Liberty St., and 479 W. 152d St., New York, N. Y.
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- BENDIT, Louis (Associate, 1905), Mgr., Hope Engrg. & Supply Co., 626-627 N. Y. Life Bldg., Kansas City, and *for mail*, 134 W. Sea Ave., Independence, Mo.
- BENEDICT, Bruce Willet (1912), Dir. Shop Laboratories, Dept. Mech. Engrg., Univ. of Ill., Urbana, Ill.

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- BENNETT, Joseph A. (1907), Chalmers Motor Co., Detroit, Mich.
- BENNETT, R. M. (Junior, 1912), Head of Automatic Mch., Jones Speedometer Co., New Rochelle, N. Y.
- BENNETT, Thomas Archibald (Junior, 1903), Dept. Sales Mgr., The B. F. Goodrich Co., and *for mail*, 39 Hawthorne Ave., Akron, O.
- BENNS, Charles P. (1898), Supt. Bldgs. and Grounds, Teachers College, Columbia Univ., and 195 Claremont Ave., New York, N. Y.
- BENSON, Orville (1901), Pequannock, N. J.
- BENTLEY, Ernest W. (1904), Mgr. Pittsburgh Office, Skinner Eng. Co., 507 Diamond Bank Bldg., Pittsburgh, and 388 Vermont Ave., Rochester, Pa.
- BENTLEY, Harry (1907), Managing Dir., Lowca Engrg. Co., Ltd., Whitehaven, and *for mail*, Beach House, Parton, Whitehaven, England.
- BENTLEY, O. D. H. (1910), Mgr. Turbine Dept., B. F. Sturtevant Co., Hyde Park, Mass.
- BENTON, Morris F. (Associate, 1903), Mech. Engr., 300 Communipaw Ave., Jersey City, and 107 Crescent Ave., Plainfield, N. J.
- BERG, Hart O. (1898; 1903), Engr., 72, Victoria St., Westminster, S. W., London, England, and *for mail*, 32 Ave. Des Champs-Elysées, Paris, France.
- BERG, P. T. (1890), Am. Vice Consul Genl., No. 1, Strandvagen, Stockholm, Sweden.
- BERGER, Franz Alfred (1909), Asst. Prof. Mech. Engrg., Washington Univ., St. Louis, Mo.
- BERGQUIST, John Gosta (1912), Cons. Engr. for Universal Portland Cement Co., The Plaza, Fifth Ave. and 59th St., New York, N. Y.
- BERLINER, Richard W. (Junior, 1903), 608 Riverside Drive, New York, N. Y.

- BERNARD, James L. (1902), Mech. Engr., Am. Bridge Co., Ambridge, and Beaver, Beaver Co., Pa.
- BERNHARD, Richard (Junior, 1901), Ch. Engr. Min., Crushing and Cement Mchy. Dept., Power & Min. Mchy. Co., Cudahy, and *for mail*, 632 Wentworth Ave., Milwaukee, Wis.
- BERRSFORD, Arthur W. (1911), V. P. and Genl. Mgr., The Cutler-Hammer Mfg. Co., Milwaukee, Wis.
- BERRY, Edgar H. (1905; 1907), present address unknown.
- BERRYMAN, Wilson G. (Junior, 1905), Engr., L. B. Stillwell, Cons. Engr., 100 Broadway, New York, and *for mail*, 36 Murray St., Flushing, N. Y.
- BERTSCH, John Charles (1901), Refrigerating Engr., P. O. Box 417, Fort Worth, Tex.
- BEST, William John (1910), Treas., Wheeler Condenser & Engrg. Co., and *for mail*, Carteret, N. J.
- BEST, William Newton (1912), Oil Furnaces and Oil Htg. Engrg., 11 Broadway, New York, N. Y.
- BETH Hugo W. H. (1912), Operating Engr., Norton Co., and 39 Burncoat St., Worcester, Mass.
- BETTS, Alfred (1881), 906 Adams St., Wilmington, Del.
- BETTS, Philander (1912), Ch. Engr., Bd. of Public Utility Commissioners, State of N. J., 412 Scheuer Bldg., and *for mail*, 738 Broad St., Newark, N. J.
- BEVIN, Sydney (Junior, 1909), Matheson Auto. Co., Wilkes-Barre, and *for mail*, 40 Welles Ave., Forty Fort, Wilkes-Barre, Pa.
- BIBBINS, James Rowland (1904; 1909), Engr. with Bion J. Arnold, 105 S. La Salle St., Chicago, Ill., and *for mail*, City Hall, San Francisco, Cal.
- BIDLE, William Sanford (1904), Mgr. Turnbuckle Dept., Cleveland City Forge & Iron Co., and *for mail*, 1809 E. 93d St., Cleveland, O.
- BIERBAUM, Christopher Henry (1894; 1898), Life Member; Bierbaum-Dollar, Inc., Cons. Engrs., V. P., Lumen Bearing Co., Pres., Molyneux Mailing Mchs. Co., 1142 Prudential Bldg., and 84 Fargo Ave., Buffalo, N. Y.
- BIGELOW, Charles H. (1904), Ch. Mech. Engr., Millville Mfg. Co., Millville, N. J.
- BIGELOW, Frank B. (1907), Sales Mgr., Murphy Iron Wks., and 74 Eliot St., Detroit, Mich.
- BIGELOW, Frank L. (1887), Pres., The Bigelow Co., and 205 Whitney Ave., New Haven, Conn.
- BIGELOW, Myron J. (1904), Mech. Engr., Molyneux Mailing Mchs. Co., 1021 Main St., and *for mail*, 357 Delaware Ave., Buffalo, N. Y.
- BILGRAM, Hugo (1885), Machinist, 1235 Spring Garden St., and 751 N. 40th St., Philadelphia, Pa.
- BILLINGS, A. W. K. (1909), Managing Dir., Ebro Irrigation & Power Co., Ltd., Apartado 491, Barcelona, Spain, and care of Pearson Engrg. Corp., 115 Broadway, New York, N. Y.

- BILLINGS, Charles E.** (1880), Vice-President, 1893-1895; President, 1894-1895; Life Member; Pres. and Genl. Mgr., Billings & Spencer Co., Hartford, Conn.
- BILLINGS, Edward J.** (Junior, 1912), Supt. of Power, St. Joseph Ry., Light, Heat & Power Co., St. Joseph, Mo.
- BILLINGS, Frederic C.** (1891), V. P., Billings & Spencer Co., and 78 Elm St., Hartford, Conn.
- BILLINGS, William Richardson** (1906), Secy. and Treas., Alberger Pump & Condenser Co., 140 Cedar St., New York, and 151 Columbia Hgts., Brooklyn, N. Y.
- BINGHAM, Elbert Howard** (1912), Wks. Mgr., The Solvay Process Co., Detroit, Mich.
- BIRD, John C.** (1910), Mech. Engr., Union Steam Pump Co., and *for mail*, 46 Howland St., Battle Creek, Mich.
- BIRD, John D.** (1891; 1905), Genl. Mgr., Power Min. Mchy. Co., Cudahy, and Milwaukee, Wis.
- BIRD, Paul P.** (1907), Commonwealth Edison Co., 120 W. Adams St., Chicago, and *for mail*, 240 Park Ave., Highland Park, Ill.
- BIRD, William W.** (1889; 1891), Prof. Mech. Engrg. and Dir., Washburn Shops, Worcester Poly. Inst., and 10 Harvard St., Worcester, Mass.
- BIRDSEY, Charles Robt.** (Associate, 1907), Ch. Engr., U. S. Gypsum Co., 200 Monroe St., and *for mail*, 528 S. Millard Ave., Chicago, Ill.
- BIRKINBINE, John** (1888), Cons. Engr., Parkway Bldg., Broad and Cherry Sts., Philadelphia, and *for mail*, Cynwyd, Montgomery Co., Pa.
- BISHOP, Charles R.** (1903), Secy. and Genl. Mgr., Am. Dist. Steam Co., Paynes Ave., North Tonawanda, and 413 Locust St., Lockport, N. Y.
- BISHOP, Frank** (1907; 1910), V. P., Auto-Elec. Refrigerating Co., 243 Ry Exch., Chicago, Ill., and *for mail*, 1241 Michigan Ave., South Bend, Ind.
- BISSELL, Geo. W.** (1890; 1899), Prof. Mech. Engrg. and Dean of Engrg., Mich. Agri. College, East Lansing, Mich.
- BITTERLICH, Walter J.** (Junior, 1906), Development Engr., Hood Rubber Co., East Watertown, and *for mail*, 27 Irving St., Watertown, Mass.
- BIXBY, Allan Smith** (1907), Supt., Natl. Malleable Castings Co., Indianapolis, Ind.
- BIXBY, Walter** (Junior, 1907), 126 Rosseter St., Dorchester, Mass.
- BIXBY, Genl. William H.** (1888), Life Member; U. S. Engr., 735 Southern Bldg., Washington, D. C.
- BIXBY, William P.** (Junior, 1908), Union Wadding Co., Pawtucket, R. I.
- BIXLER, Harry Z.** (1907), Ch. Engr., The Brier Hill Steel Co., and *for mail*, 213 Arlington St., Youngstown, O.
- BLACKBURN, Arthur Henry** (1894), Treas. and Genl. Mgr., The Green Fuel Economizer Co., Matteawan, and *for mail*, Inglewood Manor, Fishkill-on-Hudson, N. Y.

- BLACKWELL, Josiah Low (1898), 27 William St., New York, N. Y., and Continental Bldg., Baltimore, Md.
- BLAIR, William Richard (1911), Wks. Mgr., Landis Mch. Co., St. Louis, and 473 Oakwood Ave., Webster Groves, Mo.
- BLAISDELL, Allen Holt (Junior, 1912), 736 Wallace Ave., Wilkinsburg, Pa.
- BLAISDELL, Benjamin H. (1909), Ch. Engr., Manila Elec. R. R. & Light Co., Manila, P. I.
- BLAKE, Charles S. (1912), Secy., The Hartford Steam Boiler Inspc. & Ins. Co., and *for mail*, 220 Ashley St., Hartford, Conn.
- BLAKE, Edwin Mortimer (1907), Rm. 1406, 1 Liberty St., New York, N. Y.
- BLAKE, Francis E. (Junior, 1901), Mech. Engr., State Barge Canal Office, New Lyon Block, Albany, and Delmar, Albany Co., N. Y.
- BLAKELEY, George Henry (1907), Struc. Engr., Bethlehem Steel Co., and *for mail*, 519 Seneca St., South Bethlehem, Pa.
- BLAKESLEE, Frank Arthur (1910), 1233 Prospect Ave., Kansas City, Mo.
- BLANCHARD, Henry Willby (1909), Mgr., Austral Iron Wks., E. W. Tarry Co., Ltd., P. O. Box 1098, and Whiddon, Belquania, Johannesburg, Transvaal, S. A.
- BLANCHARD, Rollo Kimball (Junior, 1912), Engr., Neptune Meter Co., 90 West St., New York, N. Y.
- BLAND, John P. (1901), Printer and Ch. Engr., The Times, and *for mail*, 48 Thurleigh Rd., Nightingale Lane, London, S. W., England.
- BLANKENHORN, George Stevens (Junior, 1906), Engr., Allis-Chalmers Co., and *for mail*, 491 Jefferson St., Milwaukee, Wis.
- BLASDELL, Arthur F. (1912), Mfg. Supt., Genl. Elec. Co., and *for mail*, 191 Bartlett Ave., Pittsfield, Mass.
- BLATCHLEY, Chas. A. (1906), Mech. Engr., 1052 Drexel Bldg., Philadelphia, Pa., and 47 Walnut St., Haddonfield, N. J.
- BLAUVELT, Albert (1896), Assoc. Mgr., West. Factory Ins. Asso., Insurance Exch. Bldg., Chicago, Ill.
- BLAUVELT, Wm. Hutton (1900), Cons. Engr., Semet-Solvay Co., and *for mail*, 1917 W. Genesee St., Syracuse, N. Y.
- BLENOWE, John (1900), 723 Edgemont Blvd., Los Angeles, Cal.
- BLEYER, Chas. F. (Junior, 1909), Erecting Engr., Allis-Chalmers Co., 814 Frick Bldg., Pittsburgh, Pa., and 836 Cass St., Milwaukee, Wis.
- BLISS, Charles Eugene (1912), Member of Firm, Samuel M. Green Co., 318 Main St., Springfield, Mass.
- BLISS, Collins P. (1903), Prof. Mech. Engrg., N. Y. Univ., Univ. Hgts., and *for mail*, 2202 Andrews Ave., New York, N. Y.
- BLISS, Edwin C. (1908), Pres., E. C. Bliss Mfg. Co., V. P., A. H. Bliss Co., and 91 Sabin St., Providence, R. I.

- BLOEMEKE, R. B. (1909), Ch. Draftsman, N. Y. Edison Co., 55 Duane St., New York, N. Y.
- BLOOD, Chas. W. H. (1902), V. P. and Mech. Engr., S. A. Woods Mch. Co., Damrell St., South Boston, and *for mail*, 19 Floyd St., Winthrop Highlands, Mass.
- BLOOD, John Balch (1895; 1903), 232 High St., Newburyport, Mass.
- BLOOD, Louis Henry (1905), Designer, Brown & Sharpe Mfg. Co., Providence, and Oak Lawn, R. I.
- BLOSSOM, Francis (1902), Partner, Sanderson & Porter, 52 William St., New York, N. Y., and 65 Heywood Ave., Orange, N. J.
- BLUM, Arthur N. (1909), Mgr., Sormovo Co., Engrg. Steel Wks. & Shipyard, Sormovo, nr. Nijni Novgorod, Russia.
- BLUM, Joseph K. (Junior, 1909), Coplay Cement Mfg. Co., 200 Fifth Ave., and *for mail*, 146 Central Park W., New York, N. Y.
- BLUMGARDT, Isaac E. (Associate, 1908), 57 W. 82d St., New York, N. Y.
- BOBLETT, Kinderman M. (Associate, 1911), Radiator Expt., The Kinsey Mfg. Co., and 626 Nessler St., Toledo, O.
- BOCORSELSKI, F. E. (1907), Asst. Mech. Supt., Am. Loco. Co., and 1843 W. Grace St., Richmond, Va.
- BODWELL, Howard L. (1907), Asst. Dist. Mgr., Am. Sheet & Tin Plate Co., Vandergrift, Pa.
- BOEHM, Wm. H. (1900), Supt. Depts. Steam Boiler and Fly Wheel Ins., Fidelity & Casualty Co., 92 Liberty St., and "The Anniston," 281 Edgecombe Ave., New York, N. Y.
- BOENIG, Robert W. (1892; 1909), Engr. in Charge, Nichols Copper Co., Bor. of Queens, and *for mail*, 157 Meeker Ave., Brooklyn, N. Y.
- BOERNER, Emile C. (1895), Cons. Mech. Engr., Russell, Burd-sall & Ward Bolt & Nut Co., and *for mail*, 214 Locust Ave., Port Chester, N. Y.
- BOETTGER, Robert (1912), Secy., United Piece Dye Wks., Lodi, N. J., and *for mail*, 30 Belvedere Drive, Yonkers, N. Y.
- BOGARDUS, Henry A. (Associate, 1907), Pres. and Treas., Bogardus Co., 159 W. Huron St., and 2920 Pine Grove Ave., Chicago, Ill.
- BOLE, Wm. A. (1887), Asst. Genl. Mgr., Westinghouse Mch. Co., East Pittsburgh, and *for mail*, 722 S. Negley Ave., Pittsburgh, Pa.
- BOLGIANO, J. Ralph (Junior, 1912), N. E. Sales Mgr., Taylor-Wharton Iron & Steel Co., Rm. 709, 8 Irvington St., Boston, Mass.
- BOLLER, Alfred P., Jr. (1901), 45 E. 17th St., New York, N. Y., and East Orange, N. J.
- BOLLES, Frank G. (Associate, 1901), Mgr. and Editor, The Excavating Engineer, 267 National Ave., and *for mail*, 2447 Sycamore St., Milwaukee, Wis.

- BOLLING, Stewart, Jr. (Junior, 1912), Genl. Elec. Co., Oliver Bldg., Pittsburgh, Pa.
- BOLTON, Reginald Pelham (1898), Cons. Expt., Pres., The R. P. Bolton Co., 55 Liberty St., and 638 W. 158th St., New York, N. Y.
- BOND, Francis M. (Junior, 1909), In Charge, Section of Wood Preservation, Forest Products Lab., Madison, Wis.
- BOND, Geo. M. (1881), Manager, 1888-1891; Vice-President, 1908-1910; Mech. Engr., 141 Washington St., Hartford, Conn.
- BONE, Wm. H. (1883), V. P. and Genl. Mgr., The Ironsides Co., and *for mail*, 85 N. Ohio Ave., Columbus, O.
- BONNER, Richard Oliver (Junior, 1910), Nordberg Mfg. Co., and *for mail*, 186 13th St., Milwaukee, Wis.
- BONNETT, L. B. (1911), Civ. Service Examiner, Mech. Engr., Municipal Civ. Service Com., 299 Broadway, New York, N. Y., and *for mail*, 310 W. Jersey St., Elizabeth, N. J.
- BONNEY, Herbert Marshall (Junior, 1909), Ch. Draftsman, L. F. Fales, and *for mail*, Walpole, Mass.
- BONZANO, Adolphus (1892), Pres., Bonzano Rail Joint Co., Pa. Bldg., 15th and Chestnut Sts., and *for mail*, 331 S. 18th St., Philadelphia, Pa.
- BOORAEM, J. Francis (1895; 1906), Secy., Treas. and Genl. Mgr., Am. Enameled Brick & Tile Co., Centurian Bldg., 1182 Broadway, New York, N. Y., and South River, N. J.; res., Shore Rd., Greenwich, Conn.
- BOORAEM, J. Van Vorst (1884), Life Member; Cons. Engr., 204 Lincoln Pl., Brooklyn, N. Y.
- BOOTH, Charles A. (1909), Charge Engrg. Sales, Buffalo Forge Co., Buffalo Steam Pump Co., and *for mail*, 142 Summit Ave., Buffalo, N. Y.
- BORCHARDT, Albert Hugo (Junior, 1912), Engr., Henry R. Worthington Hyd. Wks., Harrison, N. J., and *for mail*, 1330 Pacific St., Brooklyn, N. Y.
- BORDE, George U. (1909), Cons. Engr., 820-822 Hibernia Bldg., New Orleans, La.
- BORDEN, John Morrow (Junior, 1912), Draftsman, 4622 Wayne Ave., Germantown, Philadelphia, Pa.
- BORDEN, Wm. H. (Junior, 1905), Juneau, Alaska.
- BORNHOLT, Oscar Charles (1904; 1909), Mech. Engr., Ford Motor Co., and 3020 W. Grand Blvd., Detroit, Mich.
- BOSSERT, Chas. Philip (1892; 1901), Mech. Engr., Pfister & Vogel Leather Co., and *for mail*, 179 36th St., Milwaukee, Wis.
- BOUGHTON, Judson H. (1903; 1911), Pres., Natl. Light & Power Co., Pierce Bldg., and 6343 Berlin Ave., St. Louis, Mo.
- BOURNE, George L. (1903), V. P., Loco. Superheater Co., Peoples Gas Bldg., and 5133 Ellis Ave., Chicago, Ill.
- BOURNE, Stephen N. (1891), Agt., Dundee Mills, Hookset, and *for mail*, Elm and Blodgett Sts., Manchester, N. H.
- BOURQUIN, James F. (Junior, 1907), Genl. Mgr., Paige Detroit Motor Car Co., and *for mail*, 372 Parker Ave., Detroit, Mich.

- BOUSFIELD, Alfred (1912), Ch. Engr., E. & T. Fairbanks Co., and *for mail*, P. O. Box 166, St. Johnsbury, Vt.
- BOUTON, Geo. Innes (1901; 1904), Cons. Mech. Engr., 11 Broadway, and *for mail*, 137 W. 82d St., New York, N. Y.
- BOWEN, David R. (1899), Supt., Farrel Fdy. & Mch. Co., and *for mail*, 5 Clover St., Ansonia, Conn.
- BOWEN, Harrison Seba (1895; 1908), Mech. Engr., Robert W. Hunt & Co., 2200 Ins. Exch. Bldg., Chicago, and Wilmette, Ill.
- BOWER, J. G. (Associate, 1903), Hale & Kilburn Co., 605 McCormick Bldg., Chicago, Ill.
- BOWERMAN, Myron Ralph (Junior, 1910), Asst. in Mech. Drawing and Mch. Design, Kan. State Agri. College, and *for mail*, 620 Bluemont Ave., Manhattan, Kan.
- BOWERS, George Wright (1910), Mech. and Cons. Engr., 53 Devonshire St., Boston, and *for mail*, 47 Franklin St., Somerville, Mass.
- BOWMAN, Austin Lord (1899), Cons. Engr., 165 Broadway, New York, N. Y.
- BOWMAN, Franklin Meyer (1894; 1902), V. P., Blaw Steel Constr. Co., Westinghouse Bldg., Pittsburgh, and *for mail*, Lincoln and Starr Aves., Bellevue, Allegheny Co., Pa.
- BOYD, James C. (1907), Managing Engr., Westinghouse, Church, Kerr & Co., 10 Bridge St., New York, N. Y., and 213 Park St., Montclair, N. J.
- BOYD, John T. (1887), 231 Polifly Rd., Hackensack, N. J.
- BOYD, William Charles (1907), Asst. Engr., Pittsburgh Rys. Co., 435 Sixth Ave., Pittsburgh, and *for mail*, McKees Rocks, Pa.
- BOYD, Wm. Wallace (Junior, 1910), Draftsman, Rock Island Lines, M. P. Dept., Silvis, and *for mail*, 721 25th St., Moline, Ill.
- BOYER, Edwin S. (1897; 1902; 1907), Mech. Engr., Office Walter Kidde, 140 Cedar St., New York, N. Y., and *for mail*, 93 Fairview Ave., Plainfield, N. J.
- BOYER, Frederic Quintard (Junior, 1909), Instr. Mech. Engrg., S. S. S., Yale Univ., 275 Mason Lab., and *for mail*, 1472 Chapel St., New Haven, Conn.
- BRADLEY, W. H. (1892), Ch. Engr., Consld. Gas Co., 4 Irving Pl., and 23 W. 68th St., New York, N. Y.
- BRADLEY, Wm. Joseph (1905), Supt., Rail Joint Co., and 1 Belle Ave., Troy, N. Y.
- BRADSHAW, Grant D. (Junior, 1904), Steam Engr., Cambria Steel Co., Johnstown, and 540 Third Ave., Westmont, Johnstown, Pa.
- BRADY, Joseph Benjamin (Junior, 1910), Joseph T. Ryerson & Son, 16th and Rockwell Sts., and *for mail*, care of Y. M. C. A., Kedzie Ave. and Harvard St., Chicago, Ill.
- BRADY, Joseph H. (1907), Ch. Engr., Bd. of Ed., Rm. J, Pub. Library Bldg., 9th and Locust Sts., and 3612 Paseo Blvd., Kansas City, Mo.

- BRAINE, Bancroft G. (1896; 1905), Engr., The Rail Joint Co., 185 Madison Ave., and 1186 Lexington Ave., New York, N. Y.
- BRAKEMAN, Roy Edgar (1911), Asst. Ch. Engr. Steel Wks. and Blast Furnace Dept., Tenn. Coal, Iron & R. R. Co., and *for mail*, Box 36, South Highland Sta., Birmingham, Ala.
- BRAMAN, Samuel N. (Junior, 1902), 33 Pearl St., and *for mail*, 10 Newbury St., Boston, Mass.
- BRAND, George B. (1912), Supt., The Monarch Typewriter Wks., Union Typewriter Co., Inc., and *for mail*, 435 N. Franklin St., Syracuse, N. Y.
- BRAND, Walter N. (1912), Supt., Smith Premier Wks., and *for mail*, 916 Lancaster Ave., Syracuse, N. Y.
- BRANDON, Geo. Russel (1897; 1901), V. P. and Genl. Engr., Whiting Fdy. Equip. Co., Harvey, and Flossmoor, Ill.
- BRANDON, William J. (1912), Mech. Engr., Avery Co., and 503 W. Armstrong Ave., Peoria, Ill.
- BRASHEAR, John A. (1891; Honorary, 1908), Manager, 1899-1902; Mfr., Astronomical and Physical Instruments, 1954-1964 Perryville Ave., N. S., Pittsburgh, Pa.
- BRAUN, Carl F. (Junior, 1907), Pres., C. F. Braun & Co., 503 Market St., San Francisco, Cal.
- BRAUN, Horace Herbert (Junior, 1911), Constr. Engr., Cia Reigos & Fuerza del Ebro, Apartado 491, Barcelona, Spain, and 1847 Cordova St., Los Angeles, Cal.
- BRAY, Charles W. (1888), R. D. No. 1, Bridgeport, Pa.
- BRAY, Thos. Jos. (1898), Pres., Republic Iron & Steel Co., and 524 Wick Ave., Youngstown, O.
- BRECKENRIDGE, C. E. (Associate, 1904), 17 Fairview Ave., Madison, N. J.
- BRECKENRIDGE, L. P. (1890), Vice-President, 1907-1909; Prof. Mech. Engrg., S. S. S., Yale Univ., 412 Humphrey St., and *for mail*, Mason Laboratory, New Haven, Conn.
- BREER, Carl (Junior, 1912), R. F. D. 1, Box 289, Pasadena, Cal.
- BREESE, Charles P. (1903), Second V. P., J. R. Young Fertilizer Co., Inc., 200 Citizens Bank Bldg., and *for mail*, 318 Colonial Ave., Norfolk, Va.
- BRENDLINGER, Wm. B. (Associate, 1907), Mgr., Ingersoll-Rand Co., 1226 Farmers' Bank Bldg., Pittsburgh, Pa.
- BRENEMAN, Paul Edward (Junior, 1912), Engrg. Dept., Hupp Motor Car Co., and *for mail*, 215 E. Grand Blvd., Detroit, Mich.
- BRENNAN, James (Junior, 1911), Ch. Engr., Crucible Steel Co. of Am., 2014 Oliver Bldg., and *for mail*, Beechwood Blvd., E. L., Pittsburgh, Pa.
- BRENNER, Wm. H. (1897), Managing Dir., Electromotor Equip. Co., Ltd., 59-65 Paul St., Finsbury, London, E. C., England, and *for mail*, 210 Simpson St., Atlanta, Ga.
- BRESLOVE, Joseph (Junior, 1906), Engr., Geo. T. Ladd Co., Cons. Engrs., Farmers' Bank Bldg., Pittsburgh, and *for mail*, 1108 Braddock Ave., Swissvale, Pa.

- BRETT, Henry E. (1902), Cons. Engr., 114 N. Spring St., Los Angeles, Cal.
- BREWER, Arthur (1906), Supt. of Plant, Bridgeport Brass Co., and *for mail*, 100 Unquowa Hill, Bridgeport, Conn.
- BREWSTER, Frank H. (1894), Genl. Supt., U. S. Rubber Reclaiming Wks., 724 Babcock St., and 180 Woodbridge Ave., Buffalo, N. Y.
- BREZINSKY, Emil (1912), Allis-Chalmers Co., 102 Corn Exch., Minneapolis, Minn.
- BRIDENBAUGH, Elmer Henry (1912), Mech. Engr. and Asst. Supt., Ohmer Fare Register Co., and *for mail*, R. F. D. 13, Dayton, O.
- BRIGGS, Arthur J. (1907), Mech. Engr., Smith Premier Type-writer Co., and 107 Victoria Pl., Syracuse, N. Y.
- BRIGGS, Leroy Edmund (Junior, 1911), Thomas A. Edison Lab., Orange, and *for mail*, 40 Evergreen Pl., East Orange, N. J.
- BRIGGS, William C. (1907), 133 Elm St., Elizabeth, N. J.
- BRIGHAM, Lucien M. (Junior, 1906), Sales Mgr., Manning, Maxwell & Moore, Inc., 85 Liberty St., New York, N. Y., and 33 Mt. Pleasant Ave., West Orange, N. J.
- BRIGHT, Holstein De Haven (1905; Associate, 1906), Pres., Southwark Fdy. & Mch. Co., Washington Ave. and 5th St., and *for mail*, 1608 Summer St., Philadelphia, Pa.
- BRILL, Geo. M. (1891; 1896), Manager, 1904-1907; Vice-President, 1910-1912; Brill & Gardner, Mech., Elec. and Arch. Engrs., 1134-1135 Marquette Bldg., and 6613 Harvard Ave., Chicago, Ill.
- BRINK Harry Le Roy (1912), First Asst. to Ch. Engr., Am. Hoist & Derrick Co., and *for mail*, 1738 Van Buren St., St. Paul, Minn.
- BRINKERHOFF, Harry A. (1910), Mech. Engr., 10 Bridge St., New York, N. Y., and *for mail*, 34 Park Ave., Passaic, N. J.
- BRINSMADE, Louis L. (1897; 1906), East. Sales Mgr., Westinghouse Mch. Co., 165 Broadway, and The Friesland, 103d St. and Broadway, New York, N. Y.
- BRINTON, Willard Cope (1907; 1912), Mech. Engr., Bush Terminal Co., 43d St., Brooklyn, and *for mail*, City Club of N. Y., 55 W. 44th St., New York, N. Y.
- BRISSELL, Frank M. (Junior, 1902), Estimating Engr., Evans-Almirall & Co., 1-3 Dominick St., New York, and *for mail*, 806 Park Pl., Brooklyn, N. Y.
- BRISTOL, Wm. H. (1890), Pres., The Bristol Co., Waterbury, Conn.
- BRITTON, John A. (1907), V. P. and Genl. Mgr., Pacific Gas & Elec. Co., 445 Sutton St., San Francisco, Cal.
- BROBSTON, Joseph (1912), Mgr., Dexter Portland Cement Co., Nazareth, Pa.
- BROCK, Walter I. (1902), Engr., Oswego, N. Y.
- BROCK, William M. (1894), Supt. Elec. Dept., Pub. Service, Edison Sta., and 576 E. 25th St., Paterson, N. J.

- BROCKLEBANK, Arthur P. (1912), Asst. Engr., Alberger Pump & Condenser Co., Rm. 710, 140 Cedar St., New York, N. Y.
- BRODEN, Edwin H. (1912), Asst. Supt., Rankin Wks., Am. Steel & Wire Co., Rankin, and *for mail*, 179 Gordon St., Swissvale, Pa.
- BRODHEAD, Alex. L. (Junior, 1900), Cons. Engr., Catasauqua, Pa.
- BRONAUGH, Will Logan (Associate, 1905), Secy. and Treas., Iroquois Engrg. Co., 1507 Fisher Bldg., Chicago, and 23 Pine Ave., La Grange, Ill.
- BRONSON, Edward L. (Associate, 1908), M. M., Shoe Hardware Co., and *for mail*, 60 Montgomery St., Waterbury, Conn.
- BROOKS, Edwin C. (1884), Supt. Water Wks., City Hall, and *for mail*, 255 Lexington Ave., Cambridge, Mass.
- BROOKS, Henry K. (1907), Pres., Capital Iron Wks., and Westlawn, Topeka, Kan.
- BROOKS, J. Ansel (1907; 1911), Assoc. Prof. Mechanics and Mech. Drawing, Brown Univ., Providence, R. I.
- BROOKS, Louis C. (Junior, 1901), Elec. Engr. Industrial Control Dept., Genl. Elec. Co., and *for mail*, Route 49, Schenectady, N. Y.
- BROOKS, Morgan (1885), Life Member; Prof. Elec. Engrg., Univ. of Ill., Urbana, Ill.
- BROOKS, O. C. (1912), Engr., Robins Conveying Belt Co., 13 Park Row, and *for mail*, Elks Club, 108 W. 43d St., New York, N. Y.
- BROOME, Ernest L. (1898; 1909), Mech. Engr., 49 Wall St., New York, and Tarrytown, N. Y.
- BROWN, A. G. (1884), Life Member; 39 Blackfriars, Manchester, and *for mail*, Ellerslie, Oswald Rd., Chorlton-cum-Hardy, England.
- BROWN, Alex. T. (1890), Life Member; Pres., Smith Premier Typewriter Co., Brown-Lipe Gear Co., and *for mail*, 608 W. Onondaga St., Syracuse, N. Y.
- BROWN, Charles M. (Associate, 1912), Genl. Sales Agt., Colonial Steel Co., 1203 Keystone Bldg., Pittsburgh, Pa.
- BROWN, Chas. S. (1890), Prof. Mech. Engrg., and Cons. Engr., Vanderbilt Univ., and 21 Garland Ave., Nashville, Tenn.
- BROWN, Dickson Q. (Junior, 1902), Tide Water Oil Co., 11 Broadway, New York, N. Y.
- BROWN, Edwin Hacker (Junior, 1903), Member of Firm, Hewitt & Brown, Archs. and Engrs., 716 Fourth Ave., S., Minneapolis, and Wayzata, Minn.
- BROWN, Edward W. (1910), V. P. and Genl. Mgr., Sterling Salt Co., 29 Broadway, New York, and Dongan Hills, S. I., N. Y.
- BROWN, Ernest Wayne (1912), V. P. and Engr., Blackstone and Merchants Mutual Fire Ins. Cos., 802 Grosvenor Bldg., Providence, R. I.
- BROWN, Gabriel Scott (1912), Second V. P., Alpha Portland Cement Co., and *for mail*, Meixell St., Easton, Pa.

- BROWN, Harry Sanford (Junior, 1910), N. E. Sales Mgr., Power Spec. Co., 50 Congress St., Boston, and 107 Dummer St., Brookline, Mass.
- BROWN, Harry W. (Junior, 1909), Asst. Engr., Am. Agri. Chem. Co., 92 State St., Boston, and *for mail*, 118 Brighton Ave., Allston, Mass.
- BROWN, Herman Elisha (1908), Ch. Engr., Am. Cement Engrg. Co., 315 Fifth Ave., New York, and *for mail*, 15 W. Chestnut St., Kingston, N. Y.
- BROWN, Howard Hayes (Junior, 1908), Editor, International Marine Engineering, 17 Battery Pl., New York, N. Y.
- BROWN, Hugh T. (1903), Engr., Genl. Elec. Co., 932 Stahlman Bldg., Nashville, and *for mail*, care Col. H. A. Brown, Columbia, Tenn.
- BROWN, J. Grove (1902), Mech. Engr., Groton, N. Y.
- BROWN, James Monroe (1900; 1906), Supt., Lyons Boiler Wks., De Pere, Wis.
- BROWN, J. Linwood (1902), Mech. and Cons. Engr., R. F. D. No. 1, Conneaut, Ashtabula Co., O.
- BROWN, John J. (1902), V. P. and Genl. Mgr., Wheeler Condenser & Engrg. Co., Carteret, and 338 Union Ave., Elizabeth, N. J.
- BROWN, John Quincy (1906), Asst. to Genl. Mgr., San Francisco-Oakland Terminal Ry., Oakland, 313 Syndicate Bldg., and 105 Bayo Vista Ave., Oakland, Cal.
- BROWN, John Rowland (1900; 1904; 1909), Mech. Engr., Ohio Brass Co., Mansfield, O.
- BROWN, Richard P. (Junior, 1908), Pres., Brown Instrument Co., 9th St. and Montgomery Ave., and 3617 Powelton Ave., Philadelphia, Pa.
- BROWN, Robert Garfield (1912), Instr. Mech. Engrg., Univ. of Cincinnati, Cincinnati, O.
- BROWN, Robt. S. (1891; 1904), Secy., New Britain Mch. Co., and *for mail*, 16 Forest St., New Britain, Conn.
- BROWN, Stephen Pearson (1909), Ch. Engr., Canadian No. Montreal Tunnel & Terminal Co., Ltd., and Managing Engr., Montreal Tunnel & Terminal Constr. for Mackenzie, Mann & Co., Ltd., 411 Dorchester St., W., and *for mail*, 823 University St., Montreal, Que., Canada.
- BROWN, Theophilus (1912), Genl. Supt., Marseilles Co., East Moline, Ill.
- BROWN, Walter E. (Junior, 1910), 1656 Granite St., Frankford, Pa.
- BROWN, Walter S. (1894; 1904), Engr. Power Dept., Bethlehem Steel Co., South Bethlehem, and *for mail*, 304 Seventh Ave., Bethlehem, Pa.
- BROWN, Will H. (1909), Mfr., Rose Bldg., and University Club, Cleveland, O.
- BROWN, Willard (1910), Ch. Engr. Blast Furnace and Steel Wks., Upson Nut Co., Cleveland, and *for mail*, 13,271 Euclid Ave., East Cleveland, O.

- BROWN, William Clinton (1896), Ch. Engr., Humphrey Gas Pump Co., S. A. and K. Bldg., Syracuse, N. Y.
- BROWNE, James Hugh (1912), Mech. Engr., Ch. Dept. of Plant Economics, R. Kimball Co., 15 W. 38th St., New York, N. Y.
- BROWNING, Charles, Jr. (1905), Foreman Lab., So. Pacific Co., and *for mail*, P. O. Box 1127, Sacramento, Cal.
- BROWNING, Victor Reed (1908), First V. P., Browning Engrg. Co., Pres., Browning Steam Shovel Co., and cor. Lake Shore Blvd. and Neff Rd., Cleveland, O.
- BRUCKNER, Rudolph E. (1909), Ch. Engr., The Commer. Acetylene Co., 80 Broadway, and *for mail*, 51 Hamilton Pl., New York, N. Y.
- BRUEGEL, A. Theodore (1900), Secy. and Dir., The Hess-Bright Mfg. Co., Front St. and Erie Ave., Sta. E, and *for mail*, 1102 Melrose Ave., Melrose Park, Oak Lane Sta., Philadelphia, Pa.
- BRUFF, Charles E. (1908), Constr. Engr., Chino Copper Co., Hurley, New Mex.
- BRUNNER, Roy Samuel (1912), Asst. Ch. Engr., Didier-March Co., and *for mail*, 222 Fourth Ave., Bethlehem, Pa.
- BRUSH, Charles F. (1880), Life Member; Elec. Engr., 481 The Arcade, and 3725 Euclid Ave., Cleveland, O.
- BRUYERE, Paul Tulane (Associate, 1907), Bush Terminal Co., 100 Broad St., New York, N. Y., and *for mail*, 16 Bradford Ave., Upper Montclair, N. J.
- BRYANT, F. J. (1902), M. M., Andrew McLean Co., 4th and Virginia Sts., and *for mail*, 31 Lincoln St., Passaic, N. J.
- BRYANT, William L. (1910), Mgr., Bryant Chucking Grinder Co., Springfield, Vt.
- BRYCE, James Wares (Associate, 1909), Goss & Bryce, 76 William St., New York, N. Y., and 50 Fremont St., Bloomfield, N. J.
- BRYDON, Herbert Boyd (1911), Mech. Engr., H. M. Byllesby & Co., Chicago, Ill.
- BRYEN, Thomas T. (Junior, 1911), Mech. Engr. Gas Eng. Dept., Mesta Mch. Co., and *for mail*, 2308 Murray Ave., Pittsburgh, Pa.
- BUCHANAN, A. W. (1890; 1904), Private Secy. to Mrs. Graham E. Babcock, and *for mail*, 1332 N. Cascade Ave., Colorado Springs, Colo.
- BUCK, Irwin (Junior, 1907), Ehrich Bros., 200 Fifth Ave., and *for mail*, 347 W. 55th St., New York, N. Y.
- BUCK, Lucien (Junior, 1911), Mech. Engr., The Champion Fibre Co., and *for mail*, Box 428, Canton, N. C.
- BUCKINGHAM, Henry H. (Junior, 1904), Hysham, Mont.
- BUCKLER, Albert H. (Junior, 1905), care of Inspr., Third Light House Dist., Tompkinsville, N. Y.
- BUCKLEY, John Francis (1906), Genl. Mgr., Buckley Spec. Co., and 996 Richle Ave., Lima, O.
- BUCKLEY, John H. (1912), Mech. Engr., Otis Elev. Co., and *for mail*, P. O. Box 335, Yonkers, N. Y.

- BUDD, Edward G. (1903), Pres., Edward G. Budd Mfg. Co., Ontario and I Sts., Philadelphia, and *for mail*, 502 Westview St., Germantown, Philadelphia, Pa.
- BUFFUM, F. D. (1902; Associate, 1904), Contr. Engr., 6004 Jenkins Arcade, Pittsburgh, Pa.
- BUKER, Henry (1907), West. Rep., Brown & Sharpe Mfg. Co., 626-630 Washington Blvd., Chicago, Ill.
- BULKELEY, Claude A. (1909), Cons. Mech. and Elec. Engr., 511 Terminal Bldg., 41st St. and Park Ave., New York, N. Y.
- BULKLEY, J. Norman (1902), Cons. Elec. Engr., Genl. Min. & Finance Corp., and *for mail*, P. O. Box 1242, Johannesburg, Transvaal, S. A.
- BULLARD, Dudley Brewster (1889), Mech. Engr. and Supt., Bullard Mch. Tool Co., and 2429 North Ave., Bridgeport, Conn.
- BULLEN, Arthur Charles (Junior, 1911), Mech. Engr., The Holly Sugar Co., Swink, Colo.
- BULLOCK, Edwin R. (1890; 1904), Mech. Engr., 38 Brook St., Pawtucket, R. I.
- BULLOCK, Samuel A. (1906), Engr., Baldwin Loco. Wks., 500 N. Broad St., Philadelphia, and Media, Pa.
- BUMP, Archie Edmund (Associate, 1908), Mgr. Constr. Dept., Swift & Co., 34 N. Market St., Boston, and *for mail*, 11 Alpha Rd., Dorchester, Mass.
- BUMP, Burton Nelson (1892; 1904), Engr. of Tests, Solvay Process Co., Syracuse, N. Y.
- BUNKER, Raymond U. (Junior, 1910), Second Asst. Supt., Ar buckle Bros. Refinery, foot of Pearl St., Brooklyn, N. Y.
- BUNN, Frank Wilson (1894), care of John A. Roebling's Sons Co., Trenton, N. J.
- BUNNELL, Sterling Haight (1894; 1903), Engr.-in-Chief, Griscom-Russell Co., 90 West St., and 519 W. 121st St., New York, N. Y.
- BUNTING, Douglas (1902), Ch. Engr., Lehigh & Wilkes-Barre Coal Co., and *for mail*, 26 W. Ross St., Wilkes-Barre, Pa.
- BURBANK, Louis S. (1898), Asst. Ch. Draftsman, M. E. Draper Co., and *for mail*, Hopedale, Mass.
- BURCH, H. Kenyon (1910), Ch. Engr., Inspiration Consltd. Copper Co., Miami, Ariz.
- BURCHARD, Anson W. (1888; 1891), 777 Madison Ave., New York, N. Y.
- BURDSALL, Ellwood (Junior, 1880), Secy. and Designing Engr., Russell, Burdsall & Ward Bolt & Nut Co., Port Chester, Westchester Co., N. Y.
- BURGAN, A. L. (1897; 1899; 1903), Mill Supt., Tamarack Min. Co., Osceola Consltd. Mfg. Co., Ahmeek Min. Co., Hubbell, Mich.
- BURGESS, A. Bradley (Junior, 1910), Genl. Mgr., Stand. Plunger Elev. Co., Box 254, and 8 Townsend St., Worcester, Mass.
- BURGESS, Chas. Munroe (1897), Life Member; 358 W. Main St., New Britain, Conn.

- BURGESS, Edward W. (Junior, 1908), Engrg. Dept., J. I. Case Threshing Mch. Co., and *for mail*, 923 Wisconsin St., Racine, Wis.
- BURGOON, Charles Eli (1907), Burgoon-Matthews Elec. Co., 3 N. 20th St., and Y. M. C. A. Bldg., Birmingham, Ala.
- BURKHOLDER, Charles Irvine (1912), Genl. Mgr., So. Power Co., Charlotte, N. C.
- BURLEIGH, Chas. B. (1905), Dist. Mgr. Ltg. Dept., Genl. Elec. Co., 84 State St., Boston, and 11 Oak Terrace, Malden, Mass.
- BURLEIGH, Wm. F. (1905), Genl. Supt., Murphy Varnish Co., and 48 Milford Ave., Newark, N. J.
- BURLEIGH, William Henry (Junior, 1911), Mch. Foreman, Davenport Loco. Wks., and *for mail*, 1418 Arlington Ave., Davenport, Ia.
- BURLINGAME, Luther D. (1903), Ch. Draftsman, Brown & Sharpe Mfg. Co., and *for mail*, 15 Catalpa Rd., Providence, R. I.
- BURLINGAME, Wm. B. (1906), Arecibo Ice & Soda Water Co., Inc., Arecibo, P. R., and 18 Linden St., Exeter, N. H.
- BURNHAM, Harry A. (1898; 1902), Engr. and Spec. Inspr., Factory Mut. Fire Ins. Cos., 31 Milk St., Boston, and *for mail*, Ridgewood Terrace, Waltham, Mass.
- BURNHAM, Wm. (Associate, 1888), Pres. and Treas., Stand. Steel Wks. Co., Morris Bldg., and *for mail*, 4301 Spruce St., Philadelphia, Pa.
- BURNS, A. L. (1888; 1897), V. P., Jabez Burns & Sons, 600 W. 43d St., New York, N. Y., and Glen Ridge, N. J.
- BURNS, Edward, Jr. (1912), Secy. and Ch. Engr., Guarantee Constr. Co., 140 Cedar St., New York, N. Y.
- BURNS, Homer S. (1911), Supt., Westinghouse, Church, Kerr & Co., 10 Bridge St., New York, N. Y., and 1535 Third Ave., Huntington, W. Va.
- BURR, William H. (1907), Cons. Engr., and Prof. Civ. Engrg., Columbia Univ., New York, N. Y.
- BURROUGHS, Joseph Howell, Jr. (Junior, 1911), Otis Elev. Co., 11th Ave. and 26th St., and *for mail*, 34 W. 84th St., New York, N. Y.
- BURSLEY, Joseph Aldrich (1906; 1910), Junior Prof. Mech. Engrg., Univ. of Mich., and *for mail*, 815 Forest Ave., Ann Arbor, Mich.
- BURT, Clayton R. (1909), Genl. Supt., Barber-Colman Co., 523 Fisher Ave., Rockford, Ill.
- BURTON, Isaac Francis (1908), Supt., Victor Talking Mch. Co., and *for mail*, 5219 Walnut St., Philadelphia, Pa.
- BURWELL, Robert Turnbull (1901), Ch. Inspr. Gulf Dept., Hartford Steam Boiler Inspec. & Ins. Co., 833 Gravier St., and *for mail*, 4927 Perrier St., New Orleans, La.
- BUSEY, Frank L. (1912), Engr., Buffalo Forge Co., Buffalo, N. Y.
- BUSH, Harold Montfort (1894; 1905), Cons. Engr., 136 E. Gay St., Columbus, and Briggsdale, O.

- BUSHNELL, Douglas S. (1909), Pres., N. Y. Transit Co., 26 Broadway, New York, N. Y., and 30 Elm St., Morristown, N. J.
- BUSHNELL, Fred. N. (1891), V. P. and Engrg. Mgr., Stone & Webster Engrg. Corp., 147 Milk St., Boston, and 265 St. Paul St., Brookline, Mass.
- BUSHNELL, Leonard T. (Junior, 1906), Secy. and Treas., Rockwood Sprinkler Co., 208 Columbia St., Seattle, Wash.
- BUSS, William Laing (Associate, 1912), Mgr. Chicago Office, Pittsburgh Valve, Fdy. & Constr. Co., 1215 Marquette Bldg., Chicago, and Lombard, Ill.
- BUTCHER, Joseph J. (1892), Cons. Engr. Motor Truck Dept., Guiler Engrg. Co., and *for mail*, 59 Pearl St., South Framingham, Mass.
- BUTLER, Matthew Joseph (1912), Windsor Hotel, Montreal, Que., Canada.
- BUTTERFIELD, Thomas E. (1912), Cons. Engr. and Gas Power Specialist, 138 S. New St., Bethlehem, Pa.
- BUTTOLPH, Benjamin Gilbert (1905), V. P. and Engr., Mfrs.' Mut. Fire Ins. Co., 815 Banigan Bldg., and 315 Thayer St., Providence, R. I.
- BUVINGER, George A. (1901; 1904), V. P. and Engr., Dayton Turbine Pump Co., 713 Schwind Bldg., and *for mail*, 971 Cottage Grove Ave., Dayton, O.
- BUYERS, Archie Stanton (Junior, 1912), Second Lieut., Coast Artillery Corps, U. S. A., Fort Monroe, Va., and 1202 W. 3d St., Sterling, Ill.
- BYLLESBY, H. M. (1882), Pres., H. M. Byllesby & Co., Ins. Exch. Bldg., and 4358 Drexel Blvd., Chicago, Ill.
- CAINE, Wm. Phillips (1899; Associate, 1904), Steam Expt., Tenn. Coal, Iron & R. R. Co., and *for mail*, P. O. Box 27, Ensley, Ala.
- CAIRD, Robert (1884), Managing Dir., Caird & Co., Ltd., and *for mail*, 56 Esplanade, Greenock, Scotland.
- CAIRNS, William (1911), Genl. Mgr., The Parish & Bingham Co., and *for mail*, 1421 E. 85th St., Cleveland, O.
- CALDER, C. B. (1895), V. P. and Genl. Mgr., Toledo Ship Bldg. Co., Toledo, O.
- CALDER, John (1903), Asst. to Henry Martin Leland, Cadillac Motor Car Co., Detroit, Mich.
- CALDWELL, James Henry (1912), Pres., Genl. Mgr. and Engr., The Ludlow Valve Mfg. Co., Troy, N. Y.
- CAMERON, Barton H. (1903), Pres., Cameron Stove Co., Box 635, and *for mail*, 1804 Hanover Ave., Richmond, Va.
- CAMP, Geo. E. (1893), Supt., Foster Bros. Mfg. Co., and 7 Noyes St., Utica, N. Y.
- CAMPBELL, Andrew C. (1885; 1889), Cons. Engr., Pres. and Mgr., Andrew C. Campbell, Inc., 42 State St., and *for mail*, 186 Hillside Ave., Waterbury, Conn.
- CAMPBELL, Geo. Watts (1883), Mech. Engr. and Mill Arch., 171 Broad St., and 185 Broad St., Newark, N. J.

- CAMPBELL, Gordon (Junior, 1891), Pres. and Genl. Mgr., York Rys. Co., 27 W. Market St., and R. F. D. No. 9, York, Pa.
- CAMPBELL, Gordon M. (1906), Turbine Dept., Genl. Elec. Co., West Lynn, Mass.
- CAMPBELL, Jeremiah (Associate, 1896), Gloucester, and Ipswich, Mass.
- CANBY, Harry Beaver (Junior, 1904), Second V. P., Crawford, McGregor & Canby Co., and *for mail*, 308 Central Ave., Dayton, O.
- CAPEN, Thomas W. (1883), 748 Ogden Ave., Benton Harbor, Mich.
- CAPP, John Allen (1901), Ch. of Test Lab., Genl. Elec. Co., and *for mail*, 1514 Union St., Schenectady, N. Y.
- CARACRISTI, Virginus Z. (1904; 1907), Cons. Engr., Delaware & Hudson Co., Albany, N. Y.
- CARBO, Luis Alberto (Junior, 1909), Ch. Engr., Guayaquil Sewer and Water Bd., P. O. Box 15, Guayaquil, Ecuador, S. A.
- CARD, Frederic M. (1906), 116 Edna Ave., Bridgeport, Conn.
- CARDULLO, Forrest Ellwood (1910), Prof. Mech. Engrg., New Hampshire College, Durham, N. H.
- CAREW, Clement J. (1902), V. P. and Mgr., Venango Mfg. Co., Franklin, Pa.
- CAREY, Herbert Wood (Junior, 1910), Draftsman, Cananea Consld. Copper Co., Cananea, Sonora, Mex.
- CARGILL, Walter Neal (1912), Engr., Stone & Webster Engrg. Corp., 147 Milk St., Boston, and *for mail*, 25 Addison St., Arlington, Mass.
- CARHART, Alfred B. (1907), Supt., Crosby Steam Gate & Valve Co., Boston, and *for mail*, 10 Roland St., Charlestown, Mass.
- CARHART, Herbert A. (1912), Designer, Smith Premier Wks., and *for mail*, 414 Douglas St., Syracuse, N. Y.
- CARIS, Ivan Burdell (1912), Asst. M. M., Semet-Solvay Co., Dunbar, Pa.
- CARISS, Caryington Carysfort (Junior, 1911), Ch. Draftsman, E. Leonard & Sons, and *for mail*, 396 Glebe St., London, Ont., Canada.
- CARLE, Nathaniel A. (1907), Ch. Engr., Pub. Service Elec. Co., Newark, N. J.
- CARLSSON, Carl A. V. (1905), Ordnance Engr., Bureau of Ordnance, Navy Dept., and 3921 Eighth St., N. W., Washington, D. C.
- CARLTON, Willard G. (1906), Supt. of Power, Elec. Div., N. Y. C. & H. R. R. R., Grand Central Sta., New York, N. Y.
- CARNEGIE, Andrew (1890; Honorary, 1907), 2 E. 91st St., New York, N. Y.
- * CARPENTER, Alfonso H. (Associate, 1895), care of Estates Dept., The Cleveland Trust Co., Cleveland, O.
- CARPENTER, Allan O. (Associate, 1909), Designing Dept., Ingersoll Rand Co., Painted Post, and *for mail*, 129 E. 1st St., Corning, N. Y.

- CARPENTER, Charles A. (Junior, 1912), Sales Dept., S. K. F. Ball Bearing Co., and *for mail*, 5437 B Walnut St., Philadelphia, Pa.
- CARPENTER, Charles Irving (Junior, 1912), Supvr. Mech. Drawing, Spokane Public Schs., 827 First Ave., Spokane, Wash., and 7604 Lowe Ave., Chicago, Ill.
- CARPENTER, Charles U. (1907), Pres., Fire-Proof Furniture & Constr. Co., Miamisburg, and V. P., The Republic Motor Car Co., Hamilton, O.
- CARPENTER, Harold (1908), Engr. in Charge of Tunnel Constr., Astoria Light, Heat & Power Co., 4 Irving Pl., and *for mail*, 977 Whitlock Ave., Hunts Point, New York, N. Y.
- CARPENTER, Henry Albert (1893; 1899), V. P., Riter-Conley Mfg. Co., 56 Water St., Pittsburgh, and *for mail*, R. F. D. 3, Sewickley, Pa.
- CARPENTER, James M. (1907), Pres., Treas. and Genl. Mgr., J. M. Carpenter Tap & Die Co., and 199 West Ave., Pawtucket, R. I.
- CARPENTER, Randle Churchill (1912), Prof. Mech. Engrg., Supt. Power Plant, Miss. Agri. and Mech. College, Agricultural College, Miss.
- CARPENTER, Raymond (1911), Ch. Engr. with Walter J. Jones, 30 Church St., New York, N. Y., and *for mail*, 385 Park Ave., East Orange, N. J.
- CARPENTER, Rolla C. (1883), Vice-President, 1908-1910; Cons. Engr., Prof. Exper. Engrg., Sibley College, Cornell Univ., and 125 Eddy St., Ithaca, N. Y.
- CARR, Jesse Douglas (1910), 2506 W. 8th St., Los Angeles, Cal.
- CARRIER, Willis H. (1905; 1912), Ch. Engr., Buffalo Forge Co., V. P. and Cons. Engr., Carrier Air Conditioning Co., 490 Broadway, and *for mail*, 1350 Amherst St., Buffalo, N. Y.
- CARROLL, Alexander W. (1905), Mech. Engr., Barclay, Parsons & Klapp, 60 Wall St., New York, N. Y., and *for mail*, 524 Westminster Ave., Elizabeth, N. J.
- CARROLL, Elbert Henry (1900), Supt., Morgan Constr. Co., 21 Lincoln St., and *for mail*, Rutland Terrace, Worcester, Mass.
- CARROLL, Lafayette D. (1888), Life Member; Mech. Engr., care of Humphreys & Glasgow, 38 Victoria St., London, S. W., England.
- CARROLL, M. B. (Junior, 1911), Turbine Sales Dept., Genl. Elec. Co., Bldg. 64, Lynn, Mass., and 122 Glenwood Blvd., Schenectady, N. Y.
- CARSE, David Bradley (1889), Pres., D. B. Carse & Co., City Investing Bldg., New York, N. Y.
- CARSE, John B. (1903), Member Advisory Com., U. S. Steel Corp., 71 Broadway, and Riverdale-on-Hudson, New York, N. Y.
- CARSON, Whitfield Robert (1910), Engr., The Grasselli Chem. Co., and 1530 Clarence Ave., Cleveland, O.
- CARSTENS, Alexander Bismarck (1906), Supt. of Mchy., Cia Minera de Penoles S. A., and *for mail*, Ojuela, Mapimi, Durango, Mex.

- CARTER, Edgar Robert, Jr. (Junior, 1911), Fafnir Bearing Co., New Britain, Conn., and *for mail*, 122 Central Ave., Tompkinsville, N. Y.
- CARTER, Emmett B. (1912), Ch. Engr., Midvale Steel Wks., Philadelphia, Pa.
- CARTER, Harold Thomas (Junior, 1910), Engr., Water Works, Aish Bagh, Lucknow, India.
- CARTER, Henry W. (1892; 1903), Mech. Expt., 635 Monadnock Blk., and 6132 Winthrop Ave., Chicago, Ill.
- CARTER, William Arthur (1911), Ch. Erector, Johnson & Fletcher, and *for mail*, Box 139, Bulawayo, Rhodesia, S. A.
- CARTY, Roy Franklin (Junior, 1912), Mech. Engr., Div. of Loco. Boiler Inspec., Interstate Commerce Com., and *for mail*, 1234 Harvard St., Washington, D. C.
- CARY, Albert A. (1889), Cons. Mech. Engr., 95 Liberty St., New York, N. Y.
- CASE, Albert H. (Junior, 1903), Mgr., Tenn. Copper Co., Copperhill, Tenn.
- CASE, G. Harry (1911), Ch. Mech. Engr., Jos. T. Ryerson & Son, and *for mail*, 6717 Sheridan Rd., Chicago, Ill.
- CASE, Milo McClelland (Junior, 1909), Mech. Engr., 163 Illinois St., Joliet, Ill.
- CASE, Theo. Newton (1891; 1896), Klamath Falls, Ore.
- CASH, Arthur Wise (1899), Charge Regulating Valve and Engrg. Dept., H. Mueller Mfg. Co., and 1074 W. Eldorado St., Decatur, Ill.
- CASLER, Herman (Junior, 1901), Mfr., Canastota, N. Y.
- CASSIDY, Andrew George (1911), M. M., Waltham Watch Co., Waltham, Mass.
- CASTANEDO, Walter (1907; 1909), Dist. Mgr., Power Plant Equip., 1103 Hennen Bldg., and *for mail*, 5425 Poytania St., New Orleans, La.
- CASTEELS, Aime (Junior, 1912), 3210 Howard St., Chicago, Ill.
- CASTLE, John Samuel Parsons (Junior, 1899), Ch. Engr., Benedict & Burham Mfg. Co., and 332 W. Grove St., Waterbury, Conn.
- CASTLE, Samuel Northrup (1909; 1911), Genl. Elec. Co., 30 Church St., New York, N. Y., and *for mail*, P. O. Box 288, Honolulu, Hawaii.
- CATHCART, William L. (1899), Cons. Engr., Machinery, 49-55 Lafayette St., New York, N. Y., and *for mail*, Gwynedd Valley, Pa.
- CATLIN, Abel Delancy (1906; 1907), V. P. and Wks. Mgr., The Wheland Co., and *for mail*, 612 Vance Ave., Chattanooga, Tenn.
- CATLIN, William Lyle (Junior, 1906), Supt., The Wheland Co., and 608 Kirby Ave., Chattanooga, Tenn.
- CATELL, William A. (1901), Cons. Engr., Foxcroft Bldg., San Francisco, Cal.
- CAUM, Samuel L. (Junior, 1909), Mech. Engr., South Bethlehem Natl. Bank Bldg., South Bethlehem, and *for mail*, 9th and Prospect Aves., Bethlehem, Pa.

- CHACE, William W. (1908), Mech. Engr., Cleveland Twist Drill Co., Cleveland, and *for mail*, Beachland, Nottingham, O.
- CHADWICK, Lee S. (1899; 1909), Mech. Engr., Cleveland Fdy. Co., and Cleveland Metal Products Co., and *for mail*, 10,322 Kempton Ave., N. E., Cleveland, O.
- CHALKLEY, Henry G. (1908), Mgr. and Engr., North Am. Land & Timber Co., and 920 Kirby St., Lake Charles, La.
- CHALLEN, Paul Jewill (Associate, 1897), Matteawan, N. Y.
- CHALMERS, John Brown (Junior, 1911), Instr., Pratt Inst., and *for mail*, 244 DeKalb Ave., Brooklyn, N. Y.
- CHALMERS, William J. (Associate, 1902), Chalmers & Williams, 72 W. Adams St., and 1100 Lake Shore Drive, Chicago, Ill.
- CHAMBERLAIN, A. B. (1911), Engr. Steam Div., Sta. Engrg. Dept., The Edison Elec. Ill. Co., 39 Boylston St., Boston, and *for mail*, 24 York St., Dorchester, Mass.
- CHAMBERLAIN, George E. (1907), Cons. Engr.; Genl. Supt., A. E. Staley Mfg. Co., and *for mail*, 641 W. Prairie Ave., Decatur, Ill.
- CHAMBERLAIN, Paul Mellen (1890; 1899), Cons. Engr., Chamberlain & Howell, Engrs., 1522 Marquette Bldg., and *for mail*, 2817 Linden Court, Chicago, Ill.
- CHAMBERS, F. G. (1902), Supt., Straight Line Eng. Co., and *for mail*, 111 Davis St., Syracuse, N. Y.
- CHAMBERS, Norman C. (Junior, 1905), Niles-Bement-Pond Co., 111 Broadway, New York, N. Y.
- CHAMBERS, William George (1912), Ch. Engr., The Natl. Cash Register Co., and *for mail*, 206 S. Warren St., Dayton, O.
- CHAMPION, Harry W. (1904), Pres., Newton Mch. Tool Wks., Inc., 24th and Vine Sts., and *for mail*, 2018 Mt. Vernon St., Philadelphia, Pa.
- CHANCE, Thomas Mitchell (Junior, 1912), Min. Engr. with H. M. Chance as Asst. in Genl. Cons. Practice, 837 Drexel Bldg., Philadelphia, Pa.
- CHANDLER, Clarence Austin (1900), Mech. Engr., 609-610 Penn Mut. Bldg., 24 Milk St., Boston, and East Bridgewater, Mass.
- CHANDLER, Howard T. (1912), Asst. Supt., Walter Baker & Co., Ltd., Dorchester, and *for mail*, 20 Blue Hill Ave., Mattapan, Mass.
- CHANDLER, Richard Edward (1911), Dean of Engrg., Okla. Agri. and Mech. College, Stillwater, Okla.
- CHANDLER, Sellers McKee (Junior, 1905), Pres., Chandler-Boyd Supply Co., Terminal Warehouses, and *for mail*, 8 B, Bellefield Dwellings, Pittsburgh, Pa.
- CHAPMAN, Cloyd M. (1910), Engr. in Charge, Westinghouse, Church, Kerr & Co., 10 Bridge St., New York, and Douglass-ton, L. I., N. Y.
- CHAPMAN, David Albert (Junior, 1908), Mech. Supt., Wm. Filene's Sons Co., Washington, Summer and Hawley Sts., Boston, and *for mail*, 163 Grover Ave., Winthrop, Mass.

- CHAPMAN, Frank T. (1909), East. Mgr. Vento Dept., Am. Radiator Co., Rm. 501, 104 W. 42d St., New York, N. Y., and 84 Park St., Montclair, N. J.
- CHAPMAN, George (1912), Draftsman, Nairn Linoleum Co., Kearny, and *for mail*, 446 Belgrove Drive, Arlington, N. J.
- CHAPMAN, Harry Burdett (1910), Long & Chapman, Texas City, Tex.
- CHARAVAY, Marius A. (Junior, 1908), Instr. Exper. Engrg., Stevens Inst. of Tech., Hoboken, and 67 Reservoir Ave., Jersey City, N. J.
- CHARLES, Alfred Wm. (Associate, 1909), Ch. Draftsman, Anaconda Copper Min. Co., P. O. Box 1375 and 1720 Oregon Ave., Butte, Mont.
- CHARTER, James Adams (1899), Mech. Engr., Austin Mfg. Co., and *for mail*, 1345 E. 66th St., Chicago, Ill.
- CHASE, Charles H. (1902), Prof. Steam Engrg., Tufts College, Tufts College P. O., and 39 Lincoln St., Stoneham, Mass.
- CHASE, Frederic A. (Associate, 1902), F. A. Chase & Co., and 285 Governor St., Providence, R. I.
- CHASE, Henry Mayo (1906), Mech. Engr., Deane Steam Pump Co., and *for mail*, 21 Allyn St., Holyoke, Mass.
- CHASE, Leon Wilson (1907; 1912), Head Prof. Agri. Engrg., Univ. of Neb., Univ. Farm, and 1245 N. 33d St., Lincoln, Neb.
- CHASTENEY, Charles D. (Junior, 1904), Secy., Turbine Equip. Co., 30 Church St., New York, N. Y., and 26 Atterbury St., Trenton, N. J.
- CHATAIN, Henri George (Associate, 1903), Engr. Gas Eng. Dept., Genl. Elec. Co., Erie, Pa.
- CHATARD, Wm. M. (1903; 1909), Member of Firm, Chatard & Norris, Contr. Engrs., 1415 Continental Bldg., Baltimore, Md.
- CHEEVER, Markham (1910), The Telluride Power Co., Salt Lake City, Utah.
- CHENEY, H. W. (1897; 1905), Engr. Elec. Dept., Allis-Chalmers Co., and *for mail*, 121 31st St., Milwaukee, Wis.
- CHENEY, Nathan (1906), Engr., Stone & Webster Engrg. Corp., 147 Milk St., Boston, Mass.
- CHENEY, Walter L. (1883), Sales Mgr., Lucas Mch. Tool Co., Cleveland, O.
- CHESS, Harvey B., Jr. (Junior, 1909), Pres., The Consld. Expanded Metal Cos., Braddock, and 814 Aiken Ave., E. E., Pittsburgh, Pa.
- CHESTER, C. P. (Associate, 1908), Asst. Supt., Stone & Webster Engrg. Corp., 606 Flatiron Bldg., Fort Worth, Tex.
- CHESTER, John Needels (1905), Chester & Fleming, Cons. Engrs., Union Bank Bldg., Pittsburgh, Pa.
- CHEYNEY, Algernon R. (1912), Supt. of Operation, Philadelphia Elec. Co., 28th and Christian Sts., and 5717 Ashland Ave., Philadelphia, Pa.
- CHILD, Earnest T. (1903), Pres., Child & Scott Co., 112 Wooster St., New York, N. Y., and *for mail*, 70 Mt. Pleasant Ave., West Orange, N. J.

- CHILD, Stanley G. (1912), Foreman of Mch. Shop, Baldwin Loco. Wks., and *for mail*, 20 S. 10th St., Philadelphia, Pa.
- CHILDS, Eugene (1899), Rep., Gath Mch. Tool Co., 1016 Parade St., Erie, Pa.
- CHILDS, Harold P. (Junior, 1903), Mgr. Philadelphia Office, Westinghouse Mch. Co., North Am. Bldg., Philadelphia, and 6342 Greene St., Germantown, Philadelphia, Pa.
- CHISHOLM, John James (Associate, 1904), Supt. of Power, Tenn. Coal, Iron & R. R. Co., and 1823 29th St., Ensley, Ala.
- CHOATE, William E. (1912), Genl. Mgr., Carr Fastener Co., 145 High St., Boston, and Asbury St., Hamilton, Mass.
- CHOWINS, Chas. E. (Associate, 1906), Supt. of Bldgs., Grounds and Constr., Univ. of Neb., and 1802 Washington St., Lincoln, Neb.
- CHRISTENSEN, Chas. C. (1890), Estimating Engr., Allis-Chalmers Co., and *for mail*, 2944 Logan Blvd., Chicago, Ill.
- CHRISTENSEN, Otto R. (Junior, 1911), V. P., Geo. W. Diener Mfg. Co., 400-416 Monticello Ave., and *for mail*, 2955 Logan Blvd., Chicago, Ill.
- CHRISTIANSON, Andrew (1907), Ch. Engr. Engrg. Dept., Stand. Steel Car Co., and 198 W. Pearl St., Butler, Pa.
- CHRISTIE, Alexander G. (Associate, 1907), Asst. Prof. Steam Engrg., Univ. of Wis., Madison, Wis.
- CHRISTIE, E. W. (1890), Mech. Engr., Wheeler Condenser & Engrg. Co., Carteret, and *for mail*, P. O. Box 74, Sewaren, N. J.
- CHRISTIE, Wm. Wallace (1889), Cons. Engr., Citizens' Trust Co. Bldg., and *for mail*, 527 14th Ave., Paterson, N. J.; also, 177 Broadway, New York, N. Y.
- CHURCH, Austin (Junior, 1895), Pres., Church-Field Motor Co., Sibley, Mich.
- CHURCH, Edwin Fayette, Jr. (1912), Prof. Mch. Design and Constr., W. Va. Univ., Morgantown, W. Va.
- CHURCH, Elihu Cunyngham (Junior, 1908), Secy., Dept. of Water Supply, Gas and Elec., and Ch. of Bureau of Supplies, 13-21 Park Row, and *for mail*, 4 E. 130th St., New York, N. Y.
- CHURCH, Herbert B. (Junior, 1905), Supt., Consltd. Safety Pin Co., and *for mail*, 121 Spruce St., Bloomfield, N. J.
- CHURCH, Maynard D. (1912), Supt., McEwen Co., Tulsa, Okla.
- CHURCH, Wm. Lee (1880), Manager, 1884-1887; Pres. and Cons. Engr., Ambursen Hyd. Constr. Co., 88 Pearl St., Boston, and Newton Centre, Mass.; also, Trinity Bldg., New York, N. Y.
- CHURCHILL, Charles O. (1906), Salesman, Lackawanna Steel Co., 40 Central St., Boston, and *for mail*, 28 Union St., Westfield, Mass.
- CHUTE, James Potter (1912), Supt. Floating Equip., Jay Street Terminal, and *for mail*, 635 11th St., Brooklyn, N. Y.
- CLANCY, Geo. W. (Associate, 1909), Pres., Globe Chem. Co., 68 Devonshire St., Boston, Mass., and *for mail*, 20 Manning Blvd., Albany, N. Y.
- CLAPP, Geo. H. (1891), cor. 7th and Bedford Aves., Pittsburgh, and Edgeworth, Pa.

- CLARK, Charles Ethan (1911), Mfg. Saw Mill Mch., Steam and Gas Engs., 406 N. Main St., Wellsville, N. Y.
- CLARK, Charles Paul (Junior, 1912), Clark & Norton Mfg. Co., Wellsville, N. Y.
- CLARK, Dean (1912), Stamford, Conn.
- CLARK, Edward Lord (Associate, 1905), Mgr. Boston Office, Westinghouse Mch. Co., 201 Devonshire St., Boston, and 40 Griggs Rd., Brookline, Mass.
- CLARK, Farley Granger (1907), Ch. Engr., Toronto Power Co., Toronto Elec. Light Co., Toronto St. Ry. Co., and *for mail*, 12 Adelaide St., E., Toronto, Ont., Canada.
- CLARK, Frank Henry (1910), Genl. Supt. M. P., B. & O. R. R., Baltimore, Md.
- CLARK, Frank S. (1909; 1912), Engr., Stone & Webster Engrg. Corp., 147 Milk St., Boston, Mass.
- CLARK, Herbert Hamilton (1908), Mgr., Chas. C. Moore & Co., Engrs., 424-425 I. N. Van Nuys Bldg., and 85 Victoria Park, Los Angeles, Cal.
- CLARK, Howard B. (1910), East. Rep., The McNaul-Boiler Mfg. Co. of Toledo, O., 50 Lefferts Pl., Brooklyn, N. Y.
- CLARK, John Henry (1906), Cons. Engr., Genl. Elec. Co., Schenectady, N. Y.
- CLARK, W. Van Alan (Junior, 1910), Asst. Supt. 99th St. Wks., Consld. Gas Co., 99th St. and 2d Ave., New York, N. Y.
- CLARK, Walter L. (1888), V. P., Niles-Bement-Pond Co., and Pratt & Whitney Co., 111 Broadway, New York, and Dongan Hills, S. I., N. Y.
- CLARK, Walter R. (Associate, 1908), Mech. Engr., Bridgeport Brass Co., and *for mail*, 1875 Park Ave., Bridgeport, Conn.
- CLARK, Walton (1890), Second V. P., United Gas Improvement Co., Broad and Arch Sts., and Chestnut Hill, Philadelphia, Pa.
- CLARKE, Alfred (1886), Pres., Gas & Elec. Corps., 77 Franklin St., Boston, Mass., and Walpole, N. H.
- CLARKE, Charles Edwin (Junior, 1912), Designer Mech. Engrg. Dept., Cambria Steel Co., and *for mail*, 168 Venango St., Johnstown, Pa.
- CLARKE, Charles L. (1882), Pat. Expt., Elec. and Mech. Engr., care of James F. Bragg, 181 Eighth Ave., New York, N. Y.
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- CLARKE, Leon L. (1912), Elec. and Mech. Engr., Waddell & Harrington, 1012 Baltimore Ave., and 2940 Forest Ave., Kansas City, Mo.
- CLARKE, Philip L. (Junior, 1907), Ch. Elec., Mexican Sugar Refining Co., Ingenio Santa Fe, Tlacotalpan, Vera Cruz, Mex.
- CLARKE, Samuel J. (1884), 51 Wall St., and *for mail*, 309 W. 103d St., New York, N. Y.
- CLAYTON, J. Paul (Junior, 1911), Mgr. Commercial Dept., Central Ill. Pub. Service Co., and 1500 Wabash Ave., Mattoon, Ill.

- CLEGG, Robert Ingham (1902), Editor *Woodcraft and Castings*, V. P., Gardner Ptg. Co., Caxton Bldg., and 2105 E. 81st Pl., S. E., Cleveland, O.
- CLEMENS, A. B. (1904), Prin. Sch. Mech. Engrg., Internatl. Corr. Schs., and 1034 Woodlawn St., Scranton, Pa.
- CLERGUE, Bertrand J. (Associate, 1907), Canadian Express Bldg., Montreal, Canada.
- CLIFFORD, Oliver Chas. (1903), Dept. of Elec. Engrg., Armour Inst. of Tech., 33d and Armour Ave., and *for mail*, 6020 Monroe Ave., Chicago, Ill.
- CLOUD, John W. (1880), V. P., West. B. Co., Ltd., 82 York Rd., King's Cross, London, N., England.
- CLOUDSLEY, David B. (Associate, 1908), Asst. to Ch. Engr., Bureau of Water, and *for mail*, 43 Massachusetts Ave., Buffalo, N. Y.
- CLOUDSLEY, James B. (1892), Ch. Engr. Pumping Sta., Bureau of Water, and *for mail*, 43 Massachusetts Ave., Buffalo, N. Y.
- CLOUGH, Wm. R. (1899), Prop., Rockwell Clough Co., Alton, N. H.
- CLUETT, Albert Edmund (1900; 1903), Mech. Engr., Cluett Peabody & Co., and *for mail*, P. O. Box 666, Troy, N. Y.
- CLUETT, Sanford L. (1903; 1911), First V. P. and Secy., Walter A. Wood Mowing & Reaping Mch. Co., Hoosick Falls, N. Y.
- COBB, Charles Carroll, Jr. (Junior, 1912), Draftsman, Natl. Tube Co., and 110 McKinley St., Kewanee, Ill.
- COBB, Geo. H. (1891), Genl. Mgr., N. Y. Transit Co., 802 Kilmer Bldg., and 28 Frederick St., Binghamton, N. Y.
- COBB, Stephen Prentis (Associate, 1910), Albany So. R. R., Albany, N. Y.
- COBB, Willard Halsey (Junior, 1912), Asst. Engr., Westinghouse, Church, Kerr & Co., 10 Bridge St., New York, and *for mail*, 258 Clifton Pl., Brooklyn, N. Y.
- COBLEIGH, Henry R. (Junior, 1904), Managing Editor, Power, 505 Pearl St., New York, and 503 E. 8th St., Brooklyn, N. Y.
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- COBURN, Howard L. (1901), Secy. and Ch. Engr., Ambursen Hyd. Constr. Co., 88 Pearl St., and *for mail*, Tech. Chambers, Boston, Mass.
- COBURN, R. G. (Junior, 1901), Ch. Engr., Kasigan Oil, Gas & Power Co., Independence, and 19 S. Central St., Chanute, Kan.
- COCHRANE, Robert B. (1903), 555 Frost Ave., Rochester, N. Y.
- COCKBURN, Francis B. (1910), Ch. Draftsman, Lodge & Shipley Mch. Tool Co., 3055 Colerain Ave., and 4225 Brookside Ave., Cincinnati, O.
- COES, Harold V. O. (Junior, 1907), Mgr. Chicago Office, Lockwood Greene & Co., First Natl. Bank Bldg., Chicago, Ill.
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- COFFIN, Howard E. (1907), V. P., Hudson Motor Car Co., Detroit, and Grosse Pointe Shores, Mich.
- COFFIN, Trenmor (Junior, 1912), Instr. Elec. Engrg., in Charge of Shop Wk., Univ. of Tex., Austin, Tex.
- COFFIN, Wm. Carey (1894), Struc. Engr., Jones & Laughlin Steel Co., and *for mail*, 5930 Howe St., Pittsburgh, Pa.
- COGHLIN, John P. (1901), Pres. and Treas., Coghlin Elec. Co., 257 Main St., and *for mail*, Box 35, Worcester, Mass.
- COGSWELL, Wm. B. (1880), Manager, 1880-1882; V. P. and Managing Dir., Solvay Process Co., and 1018 James St., Syracuse, N. Y.
- COLBY, Albert Ladd (1893), Cons. Engr., and Iron, Steel and Fuel Metallurgist, 447 Lehigh St., South Bethlehem, Pa., and 165 Broadway, New York, N. Y.
- COLE, Arthur W. (1904; 1911), Assoc. Prof. Mech. Engrg., Purdue Univ., Lafayette, and *for mail*, 224 Waldron St., West Lafayette, Ind.
- COLE, Charles S. (1912), Secy. and Treas., Columbia Steel Co., Pittsburg, Cal.
- COLE, Cyrus L. (Junior, 1908), Centrifugal Pump Engr. Hyd. Sales Dept., Allis-Chalmers Co., Milwaukee, and *for mail*, 575 66th Ave., West Allis, Wis.
- COLE, Dwight S. (1903), Cons. Engr. and Mech. Expt., 623 Ashton Bldg., and *for mail*, 241 Lafayette Ave., S. E., Grand Rapids, Mich.
- COLE, Edward S. (1897; 1906), Hyd. Engr., 220 Broadway, New York, N. Y., and 133 Bellevue Ave., Upper Montclair, N. J.
- COLE, Francis J. (1888), Ch. Cons. Engr., Am. Loco. Co., and 3 Avon Rd., Schenectady, N. Y.
- COLE, Frank B. (1912), Ch. Engr., R. & D. Cole Mfg. Co., and 79 E. Brood St., Newnan, Ga.
- COLE, Fred Baker (1911), Prin. Asst. Engr., Chas. T. Main, 201 Devonshire St., Boston, Mass.
- COLE, J. Wendell (1883), Dist. Mgr., William Sellers & Co.'s Grinders, and Detroit Emery Wheel Co., P. O. Box 84, Columbus, and *for mail*, Linworth, O.
- COLE, L. W. (1888; 1905), Mech. Supt., Eagle Sq. Mfg. Co., South Shaftsbury, Vt.
- COLE, Winthrop (1891; 1904), Mech. Engr., Engrg. Exper. Sta., U. S. Naval Acad., and 217 Hanover St., Annapolis, Md.
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- COLLES, Geo. Wetmore (1895; 1901), Cons. Elec. and Mech. Engr. and Pat. Expt., 404-405 Alhambra Bldg., Milwaukee, Wis.
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- COLLIER, Wm. H. (1901; 1904), Genl. Mgr., Marathon Motor Wks., Nashville, Tenn.

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- COLLINS, Francis Winfield (1912), Cons. Engr., 50 Church St., New York, N. Y.
- COLMAN, Howard D. (1912), Member of Firm, Barber-Colman Co., Rockford, Ill.
- COLVIN, Fred H. (1895; 1899), Managing Editor, American Machinist, 505 Pearl St., New York, N. Y., and *for mail*, 56 N. Maple Ave., East Orange, N. J.
- COLWELL, Augustus W. (1880), 290 E. 17th Ave., Columbus, O.
- COLWELL, James V. V. (1903), Life Member; Didier-March Co., Perth Amboy, N. J., and *for mail*, 1765 Sedgwick Ave., New York, N. Y.
- COMLY, G. Norwood (1905; 1907), Soda Ash Dept., Solvay Process Co., Syracuse, N. Y.
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- COMSTOCK, Charles Warren (Associate, 1906), Ins., 1104 New England Bldg., and 8707 Carnegie Ave., Cleveland, O.
- COMSTOCK, Charles Worthington (1908), State Engr. of Colo., Capitol Bldg., and *for mail*, 409 Boston Bldg.; also, 76 Grant St., Denver, Colo.
- COMSTOCK, Louis K. (1902), Pres., L. K. Comstock & Co., Inc., 30 Church St., New York, N. Y., and *for mail*, 195 Fernwood Ave., Upper Montclair, N. J.
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- CONARD, Wm. R. (Associate, 1906), Inspec. Engr., Savings Institution Bldg., and 1104 High St., Burlington, N. J.
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- CONNET, Frederick N. (1908), Sales Mgr. Venturi Meter Dept., Builders Iron Fdy., and 67 Whitmarsh St., Providence, R. I.
- CONNETT, Lyndon Rutan (Junior, 1898), Port Washington, L. I., N. Y.
- CONNON, George W. (1907), Engr. N. Y. Office, Honolulu Iron Wks. Co., 29 Broadway, New York, N. Y., and 246 William St., East Orange, N. J.
- CONRAD, Ernest B. (1903), Supt., Elec. Launch Co., and *for mail*, 127 Humphreys Ave., Bayonne, N. J.

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- CONRATH, George B. (1907), Genl. Mgr., Nagle Corliss Eng. Wks., and *for mail*, 443 E. 6th St., Erie, Pa.
- CONVERSE, Bernard T. (1909), Engr. of Plant, Baldwin Loco. Wks., 500 N. 15th St., Philadelphia, and Rosemont, Pa.
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- COOK, J. F. (1902), Cons. Mech. Engr., S. Neuman & Co., and The Consld. Mines Selec. Co., Ltd., 54 Cullinan Bldg., and *for mail*, P. O. Box 485, Johannesburg, S. A.
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- COOK, Wm. Pierson, Jr. (Junior, 1911), Mech. Supvr., Thompson-Starrett Co., 51 Wall St., New York, and Bright-Waters, L. I., N. Y.
- COOKE, Fred W. (1903), 384 Broadway, Paterson, N. J.
- COOKE, George William (1907), Supt., Pierce Arrow Motor Car Co., 1695 Elmwood Ave., and *for mail*, 100 Parkdale Ave., Buffalo, N. Y.
- COOKE, Harte (1897), Mech. Engr., McIntosh & Seymour Co., and *for mail*, 10 Jefferson St., Auburn, N. Y.
- COOKE, Morris Llewellyn (1903; 1909), Dir. of Pub. Wks., City Hall, Philadelphia, and *for mail*, 401 W. Walnut Lane, Germantown, Philadelphia, Pa.
- COOKE, Thomas F. (Junior, 1904), 19 W. Tupper St., and 618 Delaware Ave., Buffalo, N. Y.
- COOLEY, Erwin Stratton (1910), Supvr. of Power Plants, N. Y., N. H. & H. R. R., The Conn. Co., Housatonic Power Co., and *for mail*, 266 Willow St., New Haven, Conn.
- COOLEY, Hugh Nelson (Associate, 1910), 3414 Cedar St., Milwaukee, Wis.
- COOLEY, M. E. (1884), Vice-President, 1901-1903; Prof. Mech. Engrg. and Dean Dept. Engrg., Univ. of Mich., and 1405 Hill St., Ann Arbor, Mich.
- COOMBS, Howard A. (Junior, 1903), Pat. Atty. and Expt., 316-317 McGill Bldg., 3753 McKinley St., Washington, D. C.

- COON, J. S. (1880), Prof. Mech. Engrg. and Drawing, Supt. of Shops, Sch. of Tech., and 26 Kimball St., Atlanta, Ga.
- COON, Thurlow E. (Junior, 1908), Mech. Engr., The Coon-DeVisser Co., 1924-1925 Ford Bldg., and 55 Leicester Court, Detroit, Mich.
- COOPER, Ellis W. (1912), Head Designer Rotary Electrottype Press Dept., R. Hoe & Co., 504 Grand St., New York, N. Y., and *for mail*, 61 Orchard St., Bloomfield, N. J.
- COOPER, Geo. S. (1909), Mech. Engr., Buckeye Eng. Co., Salem, O.
- COOPER, Henry R. (1890; 1895), Solvay Process Co., and *for mail*, 1921 W. Genesee St., Syracuse, N. Y.
- COPE, Robert Harper (Junior, 1912), Secy. to Pres., Taylor-Wharton Iron & Steel Co., High Bridge, N. J.
- COPP, Wayland John (Junior, 1912), Insp. of Equip., Brooks Wks., Am. Loco. Co., and *for mail*, 421 Central Ave., Dunkirk, N. Y.
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- COREY, Fred Brainard (1894; 1900), Engr. of Insp. and Tests, Union Switch & Signal Co., Swissvale, and 245 Maple Ave., Edgewood Park, Pa.
- CORK, Robert L. (Junior, 1907), Ch. Engr., Almont Mfg. Co., Almont, Mich.
- CORLETTE, Glen H. (Junior, 1910), Fairbanks, Morse & Co., 566 Calle Moreno, Buenos Aires, Argentine Republic, S. A.
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- CORNELIUS, William A. (Junior, 1893), Mgr., Natl. Tube Co., Natl. Wks., Genl. Mgr., McKeesport Connecting R. R., and "Manager's Residence," McKeesport, Pa.
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- CORREA, William Howard (Junior, 1910), Asst. Supt., Pratt Wks., Stand. Oil Co. of N. Y., Long Island City, and *for mail*, Hotel Lucerne, Amsterdam Ave. and 79th St., New York, N. Y.
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- CORY, George Janeway, Jr. (Junior, 1912), Insp., Henry R. Worthington Hyd. Wks., Harrison, and *for mail*, 614 Summer Ave., Newark, N. J.
- CORY, Harry Thomas (1893; 1905), Cons. Engr., 802 Nevada Bank Bldg., San Francisco, and 2600 Benvenue Ave., Berkeley, Cal.
- CORYELL, Edwin M. (1901), Cons. Engr., 11 Broadway, New York, N. Y., and 410 Richmond Ave., South Orange, N. Y.

- COSTER, Edwd. Livingston (Associate, 1896), Life Associate; Broad Exch. Bldg., 25 Broad St., New York, and *for mail*, Irvington-on-Hudson, N. Y.
- CÖSTER, Eric Herbert (1910), Engr., Westinghouse, Church, Kerr & Co., New York, N. Y., and *for mail*, 9 Lawn Ridge Rd., Orange, N. J.
- COSTER, Maurice (1904), Export Mgr., Westinghouse Elec. & Mfg. Co., and Mgr. Export Dept., Westinghouse Mch. Co., 165 Broadway, and 607 Riverside Drive, New York, N. Y.
- COTTMAN, Lewis Warrington (1912), Supt. and Ch. Engr., The Palmetto Phosphate Co., Keyser Bldg., and *for mail*, P. O. Box 782, Baltimore, Md.
- COTTON, Geo. G. (1902), Supt. of Constr., Solvay Process Co., Syracuse, and *for mail*, Fairmount, Camillus P. O., N. Y.
- COVELL, Harry N. (1891), Supt., Lidgerwood Mfg. Co., Dikeman St., Brooklyn, and 7 E. 19th St., Flatbush, Brooklyn, N. Y.
- COWARD, Herbert (Junior, 1905), Coward & Long, Peoples Bank Bldg., Wilkes-Barre, and 28 Philadelphia Ave., West Pittston, Pa.
- COWGILL, Paul Everett (Junior, 1910), Engr., Central Union (Bell) Tel. Co., and *for mail*, 1775 Franklin Park S., Columbus, O.
- COWLES, William Barnum (1881), 11,312 Euclid Ave., Cleveland, O.
- COWPERTHWAIT, Allan (Junior, 1899), A. B. See Elec. Elev. Co., 220 Broadway, New York, N. Y., and Hydewood Park, Plainfield, N. J.
- COX, Claude E. (Associate, 1907), Dir. of Research, Genl. Motors Co., 88 Congress St., E., and *for mail*, 133 E. Grand Blvd., Detroit, Mich.
- COX, Frank G. (1905; Associate, 1908), Local Mgr., Otis Elev. Co., Dallas, Tex.
- COX, Frederick W. (1908), Genl. Salesman, Shewan Tomes & Co., Hongkong, China.
- COX, Jacob Dolson (1881), Pres., The Cleveland Twist Drill Co., cor. Lakeside Ave. and E. 49th St., and 3411 Euclid Ave., Cleveland, O.
- CRAIG, Charles H., Jr. (1908), Member of Firm, McClintock & Craig, 33 Lyman St., Springfield, Mass.
- CRAIG, Howard Benton (Junior, 1899), Solvay Process Co., Syracuse, N. Y.
- CRAIG, James (1897), Mech. Engr., 807-841 Garfield Ave., Jersey City, N. J.
- CRAIG, Robert (Associate, 1907), Mgr., Power Equip. Co., 212-218 Third Ave., N., Minneapolis, and *for mail*, Robbinsdale, Minn.
- CRAIGHEAD, Magruder (Junior, 1910), Engr. Escalator Dept., Otis Elev. Co., 26th St. and 11th Ave., New York, N. Y., and 2226 Locust St., Philadelphia, Pa.
- CRAIGLOW, Harry H. (Junior, 1911), Plant Engr., The Buckeye Steel Castings Co., and 80 Wood Ave., Columbus, O.

- CRAIN, John J. (1896; 1908), Elec. Engr., Fore River Shipbuilding Co., and 59 Bigelow St., Quincy, Mass.
- CRAMP, Edwin S. (1888), Vice-President, 1896-1898; 829 Park Ave., New York, N. Y.
- CRANE, Frederick Lea (Junior, 1912), Engrg. Dept., West Penn Traction & Water Power Co., Bank for Savings Bldg., Pittsburgh, and *for mail*, 413 Rebecca Ave., Wilkesburg, Pa.
- CRANSTON, Raymond Earl (Junior, 1907), Asst. Engr. to John R. Freeman, 815 Grosvenor Bldg., and *for mail*, P. O. Box 1485, Providence; also, 43 Lawn Ave., Pawtuxet, R. I.
- CRANSTON, Robert E. (1907), Caixa Postal 834, Rio de Janeiro, Brazil, S. A., and 819 Mills Bldg., San Francisco, Cal.
- CRAWFORD, Charles C., Jr. (Junior, 1906), Mgr., Houston Office, A. M. Lockett & Co., Ltd., Brazos Hotel Bldg., Houston, Tex., and 612 Royal St., New Orleans, La.
- CRAWFORD, C. W. (1905), Supt., Crawford & M'Crimmon Co., and 147 Ridge St., Brazil, Ind.
- CRAWFORD, David Francis (1899), Manager, 1910-1913; Genl. Supt. M. P., Pa. Lines, Union Sta. and Rittenhouse, Pittsburgh, Pa.
- CRAWLEY, George E. (Junior, 1908), Waterbury Co., Waterbury and Ten Eyck Sts., Brooklyn, and *for mail*, 548 W. 124th St., New York, N. Y.
- CREELMAN, Frank (1894), The St. Agnes, Convent Ave. and 130th St., New York, N. Y.
- CRESSLER, Alfred David (1910), Pres. and Cons. Engr., Kerr Murray Mfg. Co., 1613 S. Calhoun St., and 501 W. Berry St., Fort Wayne, Ind.
- CRESSLER, George Holloway (Junior, 1905), Engr., Kerr Murray Mfg. Co., and 501 W. Berry St., Fort Wayne, Ind.
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- CRISSEY, Clarence Philip (1912), Henry R. Worthington, 115 Broadway, New York, N. Y., and *for mail*, 119 Park St., East Orange, N. J.
- CROCKARD, Frank H. (1909), V. P., Tenn. Coal, Iron & R. R. Co., 1524 Brown-Marx Bldg., and 2708 Highland Ave., Birmingham, Ala.
- CROCKER, Allen Swift (1905), Supt. Industrial Arts Dept., Mechanics Inst. and Cons. Engr., 55 Plymouth Ave., and 15 Audubon St., Rochester, N. Y.
- CROCKER, Arthur George (Junior, 1911), Leading Draftsman, Chicago & Northwestern Ry., and *for mail*, 344 N. Howard Ave., Chicago, Ill.
- CROFOOT, George Emerson (Junior, 1907), Instr. Engrg. Dept., Univ. of Pa., Philadelphia, Pa.
- CROGHAN, John T. (Associate, 1909), Constr. Supt., Stone & Webster Engrg. Corp., 147 Milk St., Boston, Mass., and *for mail*, 317 Arlington St., Youngstown, O.

- CROLL, A. Gilbert (Associate, 1901), Asst. Genl. Supt., The Atlas Portland Cement Co., Supt., Northampton & Bath R. R., Northampton, and *for mail*, 30 S. West St., Allentown, Pa.
- CROMWELL, J. C. (1892; 1900), 1410 New England Bldg., and 1781 E. 89th St., Cleveland, O.
- CRONEMEYER, Henry C. (1912), Efficiency Engr., Jones & Laughlin Steel Co., Woodlawn, Pa.
- CROOK, Geo. Louis (1905), Mgr. New Installations and New Factories, M. Rumely Co., La Porte, Ind.
- CROOKER, Paul Rhodes (Junior, 1912), Supt.'s Office, Norton Grinding Co., and *for mail*, 26 Hackfeld Rd., Worcester, Mass.
- CROOKER, Ralph (1890), Acton, Mass.
- CROSBY, Oliver (1911), Pres. and Engr., Am. Hoist & Derrick Co., and *for mail*, 63 S. Robert St., St. Paul, Minn.
- CROSBY, William Wyman (1900; 1902), Member of Firm, F. W. Dean, Inc., Engrs., Rm. 1112, 53 State St., Boston, and 41 Arlington Rd., Woburn, Mass.
- CROSS, Charles N. (1911), Asst. Prof. Mech. Engrg., Leland Stanford Jr. Univ., and *for mail*, 340 Embarcadero Rd., Palo Alto, Cal.
- CROTHERS, Charles Edward, Jr. (Junior, 1905), Mech. Engr., 1663 Cambridge St., Cambridge, Mass.
- CROUCH, Calvin Henry (1898; 1908), Dean College Mech. and Elec. Engrg., Univ. of N. D., Grand Forks, N. D.
- CROWELL, Henry Walcott (1912), Asst. Supt. Inspc., The Fidelity & Casualty Co. of N. Y., 92 Liberty St., New York, N. Y.
- CROWELL, William Jas., Jr. (Junior, 1908), Chem. Engr., Gas and Test Engr., Am. Iron & Steel Mfg. Co., and *for mail*, The Heights, Lebanon, Pa.
- CROXTON, Herbert A. (1903), Pres., The Commer. Corp. of Am., 716 Hippodrome Bldg., and The Six Hundred, Prospect St., Cleveland, O.
- CRUTE, William Rowzie (Junior, 1910), Asst. M. M., Mathieson Alkali Wks., Saltville, Va.
- CULLEN, James K. (1886), Pres., The Niles Tool Wks., and Franklin and D St., Hamilton, O.
- CULLINGWORTH, Geo. R. (1884), Mech. Engr., Garvin Mch. Co., Spring and Varick Sts., New York, N. Y.
- CUMMINGS, Byron (1910), Supt. Inspc. Dept., Ocean Accident & Guarantee Corp., 59 John St., and *for mail*, 988 Simpson St., New York, N. Y.
- CUMMINGS, Edgar C. (1906), Associated Mfrs. Co., and 620 Kimball Ave., Waterloo, Ia.
- CUMMINGS, Orrie P. (1899), Supt. of Constr., A. B. See Elec. Elev. Co., 220 Broadway, and 48 W. 51st St., New York, N. Y.
- CUMMINGS, Wm. Warren (1905), Cons. and Contr. Engr., Hanover, N. H.
- CUMMINS, Peter Augustine (Junior, 1910), Spec. Apprentice, Shop Practice, Detroit Steel Products Co., and *for mail*, 30 Hazelwood Ave., Detroit, Mich.

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- CUNNINGHAM, George H. (Junior, 1910), Asst. Prof. Mech. Engrg., Univ. of Mont., and 318 S. 5th St., E., Missoula, Mont.
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- CURLEY, Robert Sylvester (Junior, 1912), Saco-Lowell Shops, and *for mail*, 1146 Chestnut St., Newton Upper Falls, Mass.
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- CURTIS, Greely S. (1897; 1904), Treas., Burgess Co. & Curtis, Marblehead, and 360 Essex St., Salem, Mass.
- CURTIS, Ralph E. (1888; 1901), Edison Elec. Ill. Co. of Boston, 39 Boylston St., Boston, and *for mail*, 15 Allen St., West Roxbury, Mass.
- CURTIS, Walter Molbray (1912), Mgr. Engrg. Dept., N. E. Audit Co., and *for mail*, P. O. Box 597, Springfield, Mass.
- CUSHING, Geo. H. (1891), Genl. Supt., H. B. Smith Co., and *for mail*, 37 Broad St., Westfield, Mass.
- CUSHMAN, Arthur Wesley (Junior, 1905), Supt., Parker Webb & Co., Michigan and 20th Sts., Detroit, Mich.
- CUSHMAN, Frank, Jr. (Junior, 1907), Vice-Prin., Manual Training H. S., and 3012 E. 27th St., Kansas City, Mo.
- CUSHMAN, Herbert E. (Associate, 1898), Treas. and Genl. Mgr., Morse Twist Drill & Mch. Co., and 144 Hawthorne St., New Bedford, Mass.
- CUTLER, Arthur E. (1910), Mech. Engr., Ashton Valve Co., 271 Franklin St., Boston, and *for mail*, 46 Marshall St., Somerville, Mass.
- CUTTER, George Albert (1896; 1904), Genl. Mgr., Cell Drier Mch. Co., and 47 Prospect St., Taunton, Mass.
- DAGGETT, Herbert Chapin (1907), Mgr. N. E. Branch Office, S. Morgan Smith Co., 176 Federal St., Boston, Mass.
- DAHLSTRAND, Hans (1910), Mech. Engr. Steam Turbine Engrg. Dept., Allis-Chalmers Co., and *for mail*, 247 18th St., Milwaukee, Wis.
- DALE, Orton G. (1894; 1909), Mgr., Mead-Morrison Mfg. Co., 149 Broadway, New York, N. Y., and Plainfield, N. J.
- DALLETT, Elijah (1900), Mech. Engr., Midvale Steel Co., and *for mail*, Chestnut Hill, Philadelphia, Pa.
- DALLETT, W. P. (1888), Life Member; Hyd. Engr. and Contr., 49 N. 7th St., Philadelphia, and Media, Pa.
- DALLIS, Park Andrew (1911), Mill Arch. and Engr., 913 Candler Bldg., Atlanta, Ga.
- DALLY, John Horton (1903), Ch. Engr., N. Y. Stock Exch., 10 Broad St., New York, N. Y., and 77 Glenwood Ave., East Orange, N. J.

- DALTON, William (1902), Ch. Engr., Am. Loco. Co., Schenectady, and R. F. D. 2, Glenville, N. Y.
- DAM, William Valdemar (1906), Genl. Mgr., Thompson & Co., and *for mail*, "Kalimna," Hall St., Castlemaine, Victoria, Australia.
- DAMON, John H. (1908; 1910), M. M. and Expt. on Rope Transmission, Plymouth Cordage Co., North Plymouth, and 258 Court St., Plymouth, Mass.
- DAMON, Walter Henry (1909), Supt. of Generating, United Elec. Light Co., 32 Bancroft St., Springfield, Mass.
- DANFORTH, N. Loring (Junior, 1903), Pres., John W. Danforth Co., 70-72 Ellicott St., Buffalo, N. Y.
- DANFORTH, Raymond Hewes (1912), Engr. Asst., Sch. Marine Engrg., U. S. Naval Acad., and 6 Martin St., Annapolis, Md.
- DANIELS, Fred Harris (1886), Vice-President, 1902-1904; Life Member; Ch. Engr., Am. Steel & Wire Co., 94 Grove St., and *for mail*, 214 Salisbury St., Worcester, Mass.
- DANKS, Alfred C. (Junior, 1907), Ch. Engr. Gas Engs., Edgar Thomson Wks., Carnegie Steel Co., Braddock, and *for mail*, 331 West St., Wilkesburg Sta., Pittsburgh, Pa.
- DARBEE, William (1900; 1912), Elec. Bond & Share Co., 71 Broadway, New York, N. Y.
- DARBY, John (1907), Cons. and Designing Engr., 7 E. 42d St., New York, N. Y., and *for mail*, 111 Summit Ave., Summit, N. J.
- DARBY, John Henry (1901), 155 Norfolk St., Sheffield, England.
- DARLING, Philip G. (1906; 1912), Ch. Engr. Exper. Sta., E. I. du Pont de Nemours Powder Co., and 1712 Washington St., Wilmington, Del.
- DARLINGTON, Philip J. (1904), Pres., The Roto Co., and 235 Sisson Ave., Hartford, Conn.
- DARLOW, A. M. (Junior, 1912), Supt. M. P., Buffalo & Susquehanna R. R., Galeton, Pa.
- DARRIN, David H. (1892; 1900), Pres., Automatic Switch Co., 131 Liberty St., and 310 Convent Ave., New York, N. Y.
- DART, William Crary (Associate, 1907), Pres., R. I. Tool Co., and 16 Stimson Ave., Providence, R. I.
- DASHIELL, W. W. (1890), Pres. and Genl. Mgr., N. Y. Lubricating Oil Co., V. P., Bayway Refining Co., 116 Broad St., and 848 St. Nicholas Ave., New York, N. Y.
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- DAUGHERTY, Samuel Bovard (1905), Ch. Engr., Gas Eng. Dept., Snow Steam Pump Wks., and *for mail*, 129 Claremont Ave., Buffalo, N. Y.
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- DAVIDSON, Charles Jackson (1904), Manager, 1911-1914; Member of Firm, Woodmansee, Davidson & Session, Inc., 1048 First Natl. Bank Bldg., Chicago, Ill.
- DAVIDSON, J. Brownlee (1905; 1912), Prof. Agri. Engrg., Ia. State College, and 719 Fifth St., Ames, Ia.
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- DAVIDSON, Morgan W. (1912), Prof. Mech. Engrg., Univ. of S. D., and *for mail*, 222 Pine St., Vermillion, S. D.
- DAVIS, A. C. (1909), V. P. and Mgr., Am. Mfg. Concern, Jamestown, and Main and Homestead Sts., Falconer, N. Y.
- DAVIS, Charles Ethan (1886), Genl. Mgr., Am. Locomotive Co., Providence, R. I.
- DAVIS, Charles Henry (1890), 18 Old Slip, New York, N. Y., and South Yarmouth, Mass.
- DAVIS, Chester B. (1890), Cons. Engr., Suite 1416, 90 West St., New York, and 3353 Sixth Ave., Troy, N. Y.
- DAVIS, Edwin Halsted (Junior, 1907), Engr., Henry R. Worthington, Harrison, and *for mail*, 371 Park Ave., East Orange, N. J.
- DAVIS, George H. (Junior, 1907), Secy., J. J. Kenyon Mfg. Co., and 18 Kossuth St., Pawtucket, R. I.
- DAVIS, Herbert R. (Junior, 1901), Supt. Field Dept., Kan. Natural Gas Co., Independence, Kan.
- DAVIS, John Francis (Junior, 1912), with F. H. Davis, 175 Richdale Ave., and *for mail*, 33 Arlington St., Cambridge, Mass.
- DAVIS, Joseph P. (1880), 332 Palisade Ave., Yonkers, N. Y.
- DAVIS, Leon Keith (1911), Mgr. Fire Prevention Dept., Hutchinson & Rivinus, 425 Walnut St., Philadelphia, Pa.
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- DAVIS, Robt. G. (1900; 1902), Cons. and Constr. Engr., Insurance Bldg., W. Main St. and Irving Pl., Rochester, N. Y.
- DAVIS, Roswell (Junior, 1912), Supt. Grounds and Bldgs., Princeton Univ., and 37 Bank St., Princeton, N. J.
- DAVIS, William J., Jr. (1910), Pacific Coast Engr., Genl. Elec. Co., 720 Rialto Bldg., San Francisco, Cal.
- DAVISON, Clarence M. (Junior, 1909), Mech. Engr., Alberger Pump & Condenser Co., Wks. Office, and *for mail*, 25 Bayview Terrace, Newburgh, N. Y.
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- DAVOUD, Vahram Y. (1906; Associate, 1909), Elec. and Mech. Engr., Utah Power & Light Co., Salt Lake City, Utah.
- DAWES, Herbert N. (1902), V. P., Nightingale & Childs Co., Pres., Cerro Gordo Fruit Co., V. P., Putnam-Morrill Co., 205 Congress St., Boston, and 100 Orange St., Chelsea, Mass.

- DAWES, Robert (1890; 1896), V. P. and Supt., Haskell, Dawes Mch. Co., Erie and Trenton Aves., Philadelphia, and 5014 Penn St., Frankford, Philadelphia, Pa.
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- DAY, Paul (1909), Treas., Federal Lumber Co., 920-921 Rogers Bldg., Vancouver, and Kenisdale, B. C., Canada.
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- DEAN, Arthur M. (Junior, 1907), Mech. Engr., Matheson Auto. Co., and 38 Marion Pl., Kingston Sta., Wilkes-Barre, Pa.
- DEAN, Dion Kanouse (Junior, 1912), Mgr. Heater Dept., Alberger Condenser Co., New York, N. Y., and *for mail*, 64 Jaques Ave., Rahway, N. J.
- DEAN, Edmund Willard (1905), Ch. Draftsman, Duplex Ptg. Press Co., and 67 Calhoun St., Battle Creek, Mich.
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- DECKER, Edward P. (1906), Pres., E. P. Decker & Co., 80 Griswold St., and 79 Pingree Ave., Detroit, Mich.
- DEEDS, Edward Andrew (Associate, 1900), V. P., Natl. Cash Register Co., and Pres., The Dayton Engr. Laboratories Co., and *for mail*, Moraine Farm, Dayton, O.
- DE HAVEN, Irvin C. (Junior, 1907), Dist. Mgr., A. Sorge, Jr., Co., 525 State Life Bldg., Indianapolis, Ind.
- De LAMATER, Oakley R. (1902), Supt., Mitchell Motor Co. of N. Y., 419 W. 55th St., New York, N. Y., and 38 Winthrop Pl., Englewood, N. J.
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- DE LEEUW, Adolph L. (1901), Mech. Engr., Cincinnati Milling Mch. Co., Cincinnati, and *for mail*, 308 McGregor Ave., Mt. Auburn, Cincinnati, O.
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- DENNISON, Wilburn Norris (1905), Ch. Engr. and Genl. Supt., The Gramophone Co., Ltd., English and Continental Wks., Hayes, Middlesex, England.
- DENSMORE, Edward D. (Associate, 1898), Engr. and Arch., Densmore & LeClear, 88 Broad St., Boston, and 26 Downing Rd., Brookline, Mass.
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- DEUEL, Harry Austin (1904), Supt. Open Hearth, Colo. Fuel & Iron Co., and 205 W. Orman Ave., Pueblo, Colo.
- De VED, Horace W. (Junior, 1908), Engr., N. Y. & Queens Elec. Light & Power Co., 444 Jackson Ave., Long Island City, and 103 Whitestone Ave., Flushing, L. I., N. Y.
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- DIEDERICH, Herman (Junior, 1904), Prof. Exper. Engrg., Sibley College, Cornell Univ., Ithaca, N. Y.
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- DIEPENBROCK, Joseph F. (1912), Ch. Engr., Henry R. Worthington Hyd. Wks., Harrison, and *for mail*, 25 Kingsley St., West Orange, N. J.
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- DIETZ, Carl F. (1903; 1910), Advisory Engr. and Asst. Sales Mgr., Norton Co., and *for mail*, 3 Westland St., Worcester, Mass.
- DILLARD, Capt. James B. (1907; Associate, 1909), Insp. of Ordnance, U. S. A., care of Newport News Shipbuilding & Dry Dock Co., Newport News, Va.
- DILLON, Edward L. (1909), Mech. Engr., Fairbanks, Morse & Co., 1330a Clara Ave., St. Louis, Mo.
- DILLON, Frederick N. (1902), Treas., D. M. Dillon Steam Boiler Wks., and 16 Prospect St., Fitchburg, Mass.
- DILLON, Robert Emmet (Junior, 1912), Head of Steam Div. Standardizing and Testing Dept., Edison Elec. Ill. Co. of Boston, 39 Boylston St., Boston, Mass.
- DIMAN, Geo. Henry (1904), Cons. Engr., Wood Worsted Mill, Lawrence, and *for mail*, 62 Bailey St., South Lawrence, Mass.
- DIMAN, Walter G. (1909), Supv. Engr., Amoskeag Mfg. Co., Manchester, N. H.
- DINGEE, W. W. (1886), Ret. Mech. Engr., 5811 Madison Ave., Chicago, Ill.
- DINKEL, Geo. (1890; 1897), Cons. Engr., Am. Sugar Refining Co., 117 Wall St., New York, N. Y., and *for mail*, 35 Highland Ave., Jersey City, N. J.
- DINKEY, A. C. (1902), Pres., Carnegie Steel Co., Carnegie Bldg. and Ellsworth and Amberson Aves., Pittsburgh, Pa.
- DIRKS, Henry B. (Junior, 1907), 2459 Montrose Ave., Chicago, Ill.
- DISERENS, Paul (Junior, 1908), Engr. of Tests, Laidlaw-Dunn-Gordon Co., Cincinnati, and *for mail*, Wilhelm Apt., Avondale, Cincinnati, O.

- DIXON, Charles Francis (1903; 1911), Asst. Engr., N. E. Engrg. Co., 50 Church St., New York, and 1424 E. 14th St., Brooklyn, N. Y.
- DIXON, Robert M. (1884), Pres., Safety Car. Htg. & Ltg. Co., 2 Rector St., New York, N. Y., and 21 Walnut St., East Orange, N. J.
- DIXON, Walter Frank (1889; 1894), Mgr., Singer Mfg. Co.'s Wks., Podolsk, Moscow Govt., Russia.
- DOANE, John Appleton (1910), Mgr., Worcester Piston Ring & Mch. Wks., 22 Commercial St., Worcester, Mass.
- DOANE, Dr. W. H. (1885), 2223 Auburn Ave., and Watch Hill Rd., Cincinnati, O.
- DOBLE, William A. (1891), Ch. Engr., The Pelton Water Wheel Co., 19th and Harrison Sts., and 2611 Broadway, San Francisco, Cal.
- DOBSON, Frank (1906), 319-321 E. 53d St., New York, N. Y.
- DOBSON, W. J. M. (1881), Cons. Mech. Engr., 398 Adelphi St., Brooklyn, N. Y.
- DOCK, Herman (1889), Mech. Engr., U. S. Motor Co., Westerly, R. I.
- DODDS, William B. (Junior, 1907), Mass. Ltg. Cos., and *for mail*, 16 Oxford St., Cambridge, Mass.
- DODDS, Wm. E. (1891), Genl. Mgr., Stand. Cast Iron Pipe & Fdy. Co., Bristol, Pa.
- DODGE, Albert Cole (1908), Genl. Supt., West. Elec. Co., North Woolwich, London, England.
- DODGE, Austin R. (1907), Engr., Genl. Elec. Co., Schenectady, N. Y.
- DODGE, James Mapes (1884), Manager, 1891-1894; Vice-President, 1900-1902; President, 1903; Chairman of Bd., Link-Belt Co., Nicetown, Philadelphia, and McKean Ave., Germantown, Philadelphia, Pa.
- DODGE, Kern (1902; 1912), Cons. Engr., Morris Bldg., 1421 Chestnut St., Philadelphia, and 5135 Pulaski Ave., Germantown, Philadelphia, Pa.
- DOELLING, Louis Karl (1906), Pres. and Genl. Mgr., De La Vergne Mch. Co., foot E. 138th St., New York, and 26 Colonial Pl., New Rochelle, N. Y.
- DOHERTY, Henry L. (1903), Pres., Denver Gas & Elec. Co., 60 Wall St., New York, N. Y.
- D'OLIER, William Livingston (1911), Pres., D'Olier Engrg. Co., 1304 Morris Bldg., Philadelphia, Pa.
- DOLLAR, William M. (1896; 1903), Cons. Engr., Bierbaum-Dollar, Inc., 1144 Prudential Bldg., Buffalo, and Springbrook, N. Y.
- DOMONOSKE, Arthur B. (Junior, 1912), Instr. Mech. Engrg., Univ. of Cal., and *for mail*, 1501 Milvia St., Berkeley, Cal.
- DONALDSON, Stuart A. (Junior, 1909), Engr., New Jersey Zinc Co., and Lafayette Ave., Palmerton, Pa.
- DONNELLY, James A. (1911), Cons. Htg. and Vent. Engr., Pres., Positive Differential System Co., 132 Nassau St., New York, N. Y.

- DONNELLY, William T. (1903), Cons. Engr., 17 Battery Pl., New York, N. Y.
- DOOLITTLE, Harold Lukens (Junior, 1910), Asst. Engr., So. Cal. Edison Co., Los Angeles, and *for mail*, 127 N. Catalina Ave., Pasadena, Cal.
- DOOLITTLE, Warren P. (Junior, 1912), Designing Engr., The Waterbury Mfg. Co., Waterbury, and *for mail*, 130 S. Main St., Naugatuck, Conn.
- DORER, Oscar H. (Junior, 1912), Testing Dept., Henry R. Worthington Hyd. Wks., Harrison, and *for mail*, 812 Stuyvesant Ave., Irvington, N. J.
- D'ORNELLAS, T. V. (Associate, 1907), Cons. Elec. Engr., Peruvian Govt., Calle de Lima 15, Chorrillos, Peru, S. A.
- DORNER, Frederick Harry (1907; 1911), Secy., Power Improvement Co., 510 Enterprise Bldg., and *for mail*, 716 Prospect Ave., Milwaukee, Wis.
- DORWARD, David, Jr. (1910), Mech. Engr., Genl. Pipe Line Co. of Cal., 149 California St., San Francisco, and 803 Santa Clara Ave., Alameda, Cal.
- DOTY, Paul (1891; 1904), V. P. and Genl. Mgr., St. Paul Gas Light Co., and 286 Laurel Ave., St. Paul, Minn.
- DOUGHTY, A. J. (1902), Factory Mgr., Burroughs Adding Mch. Co., and *for mail*, 45 Virginia Ave., Detroit, Mich.
- DOUGHTY, George A. (Associate, 1903), Secy., Logan Iron Wks., 52 Commercial St., and *for mail*, 1161 Dean St., Brooklyn, N. Y.
- DOUGHTY, Wm. F. (Junior, 1899), Mech. Engr., 17 Beach St., Flushing, L. I., N. Y.
- DOUGLAS, Courtney Carlos (1904; Associate, 1908), Dist. Mgr. Turbine Sales, Genl. Elec. Co., 1023 Monadnock Bldg., Chicago, and 159 N. Ridgeland Ave., Oak Park, Ill.
- DOUGLAS, Edwin Rust (1912), Cons. Engr., Philadelphia, and *for mail*, 13 Oakdale Ave., Glenside, Pa.
- DOUGLAS, Walter Cooley (Junior, 1911), Secy., Topping Bros., Inc., 122 Chambers St., New York, N. Y., and *for mail*, 168 W. Putnam Ave., Greenwich, Conn.
- DOUGLASS, Wm. M. (1884), Treas., Globe Real Estate Co., 18 S. 6th St., Allentown, Pa.
- DOW, Alex (1895), Vice-President, 1906-1908; V. P. and Genl. Mgr., Edison Ill. Co., 18 Washington Ave., and 50 Garfield Ave., Detroit, Mich.
- DOW, Benjamin Warren (Junior, 1911), Asst. Engr. Constr. Wk., Stone & Webster Engrg. Corp., 147 Milk St., Boston, and *for mail*, 7 Standish St., Dorchester, Mass.
- DOW, Charles E. W. (1911), Sales Agt., Tillotson Humidifier Co., 78 Fountain St., Providence, R. I., and *for mail*, 7 Standish St., Dorchester, Mass.
- DOWD, Wyllys E., Jr. (1911), 111 Broadway New York, N. Y.
- DOWNE, Henry S. (1886), Dir., Compagnie Nationale des Radiateurs, 149 Blvd. Haussmann, and 22 Ave. Raphaël, Paris, France.

- DOWNES, Nate Worswie (Junior, 1911), Ch. Draftsman, J. H. Brady, Cons. Engr. and Ch. Engr., Kansas City Sch. Dist., and *for mail*, Rm. J, Public Library, Kansas City, Mo.
- DOWST, F. B. (1892), West Roxbury, Boston, Mass.
- DOYING, William Albert E. (1907), Inspc. Engr., Isthmian Canal Com., Mills Bldg. Annex, and 3525 14th St., N. W., Washington, D. C.
- DRAVO, Geo. P. (1899; 1906), Pres., Power Improvement Co., 510 Enterprise Bldg., and Sta. E., Box 186, R. N. 8, Milwaukee, Wis.
- DREW, Wilbert Shepard (1911), 425 W. 124th St., New York, N. Y.
- DREWETT, Wm. A. (1888), Supt., M. T. Davidson Co., 43-53 Keap St., and *for mail*, 524 Lafayette Ave., Brooklyn, N. Y.
- DREYER, Charles Frederick (Junior, 1912), Dept. Mech. Engrg., Escola de Engenharia de Porto Alegre, Brazil, S. A.
- DREYFUS, Edwin D. (1905; 1911), West Penn Traction & Water Power Co., 31 Fidelity Title & Trust Co. Bldg., Pittsburgh, and 116 Linden Ave., Edgewood Park, Swissvale, Pa.
- DU BARRY, Ed. G. (Junior, 1910), Draftsman, Wabash Pittsburgh Terminal Ry Co., Rook, and *for mail*, 5321 Penn Ave., Pittsburgh, Pa.
- DU BOIS, A. Jay (1881), Life Member; Prof. Civ. Engrg., S. S. S., Yale Univ., New Haven, Conn.
- DU BOSQUE, F. L. (1892), Pa. R. R., Pa. Sta., New York, N. Y.
- DU BRUL, Ernest F. (Associate, 1900), Pres., Pyro Clay Products Co., 507 E. Pearl St., and cor. Beecher and Melrose Ave., Cincinnati, O.
- DU BRUL, Napoleon (1900), Pres., Miller, Du Brul & Peters Mfg. Co., 507-519 E. Pearl St., and Colerain Ave., Sta. A, Cincinnati, O.
- DUCAS, Charles (Junior, 1903), Cons. Engr., 30 Church St., and 515 W. 184th St., New York, N. Y.
- DUCOMMUN, Edwd. (1898; 1903), Asst. Ch. Engr., Am. Sugar Refining Co., and *for mail*, 179 Harrison Ave., Jersey City, N. J.
- DUDEN, Emil G. (Junior, 1907), Ch. Engr., W. B. Scaife & Sons Co., Oakmont, Pa.
- DUERNER, Henry L., Jr. (1901), Mech. Engr., 84 Fremont St., Battle Creek, Mich.
- DULL, Raymond Wm. (1908), Pres., Raymond W. Dull & Co., and *for mail*, 395 Garfield Ave., Aurora, Ill.
- DUMOULIN, Walter Louis (Junior, 1911), Supt., Morenci Water Co., Morenci, Ariz.
- DUNBAR, James Horace (1907), Mech. Engr., Grasselli Chem. Co., Cleveland, O.
- DUNBAR, William Otis (1904), Asst. Engr. Test Dept., Pa. R. R., and 1216 13th St., Altoona, Pa.
- DUNCAN, Albert Greene (1909), Treas., Chicopee Mfg. Co., Treas., Harmony Mills, and *for mail*, P. O. Box 2966, Boston, Mass.

- DUNCAN, Lindsay (1912), Mech. Engr., Steptoe Valley Smelting & Min. Co., McGill, Nev.
- DUNCAN, William Millen (1911), V. P., Ill. Stoker Co., Genl. Mgr., Duncan Fdy. Co., Secy. and Treas., Am. Coal Washing Co., Alton, Ill.
- DUNCOMBE, Frederic H. (Junior, 1909), Engr. Min. Dept., Allis-Chalmers Co., 30 Church St., New York, and 425 S. Columbus Ave., Mt. Vernon, N. Y.
- DUNHAM, George W. (1908), V. P. and Cons. Engr., Chalmers Motor Co., and 375 Iroquois Ave., Detroit, Mich.
- DUNKIN, William Van (1909), Ch. Draftsman, Deere & Co., and *for mail*, 1810 12th Ave., Moline, Ill.
- DUNKLE, H. Edw. (Associate, 1907), Draftsman, Semet-Solvay Co., and *for mail*, Solvay Club House, Syracuse, N. Y.
- DUNLAP, George W. (1911), Mech. Engr., Internatl. Ry Co., Main and Michigan Sts., Buffalo, N. Y.
- DUNN, Charles (1897), 17 Ivy St., Boston, Mass.
- DUNN, Gano (1911), Pres., J. G. White Engrg. Corp., 43 Exch. Pl., and *for mail*, 117 W. 58th St., New York, N. Y.
- DUNN, Kingsley G. (Associate, 1907), V. P., Hunt, Mirk & Co., Inc., 141 Second St., San Francisco, Cal.
- DUNN, William Robert (1910), Wks. Mgr., Vulcanite Portland Cement Co., Easton, Pa., and *for mail*, Phillipsburg, N. J.
- du PONT, Coleman (1906), Pres., E. I. du Pont de Nemours Powder Co., 964 du Pont Bldg., and 808 Broome St., Wilmington, Del.
- DU PRIEST, John Randolph (1911), Instr., Sibley College, Cornell Univ., and 112 Valentine Pl., Ithaca, N. Y.
- DURAND, Nelson C. (1889), Second V. P., Thomas A. Edison, Inc., Orange, and 380 Roseville Ave., Newark, N. J.
- DURAND, Wm. F. (1883), Vice-President, 1911-1913; Prof. Mech. Engrg., Leland Stanford Jr. Univ., Stanford University P. O., Cal.
- DURANT, Aldrich (Junior, 1906), Res. Engr., MacArthur-Perks Co., Ltd., and *for mail*, Enna No. 1, Havana, Cuba.
- DURFEE, Walter C. (Junior, 1908), Mfg. and Cons. Chem., 516 Atlantic Ave., Boston, and *for mail*, 62 Holbrook St., Jamaica Plain, Mass.
- DURLEY, Richard John (1899), Member of Firm, MacMullen, Riley & Durley, 4 Beaver Hall Sq., and 20 Summerhill Ave., Montreal, P. Q., Canada.
- DUSOSSOIT, Octave (Associate, 1911), Res. Agt., Hohmann & Maurer Mfg. Co., Boston, and *for mail*, 156 Mason Terrace, Brookline, Mass.
- DUTCHER, Edward Hamilton (Junior, 1912), Genl. Mfg. Harvesting Mch., P. O. Box 103, Hoosick Falls, N. Y.
- DU VILLARD, Henry A. (1884), Mech. Engr., 173 George St., East Side Sta., Providence, R. I.
- DWELSHAUVERS-DERY, V. (Honorary, 1886), Prof. Emeritus at Univ. of Liege, 4 Quai Marcellis, Liege, Belgium.

- DWYER, Emmet (Junior, 1907), Asst. Supt., Mich. Stove Co., and *for mail*, 679 Jefferson Ave., Detroit, Mich.
- DYER, Frank L. (Associate, 1901), Pres., Genl. Film Co., 200 Fifth Ave., New York, N. Y., and Head of Parkhurst Pl., Montclair, N. J.
- DYER, Robert A., Jr. (1908), Asst. Genl. Mgr., Rochester, Syracuse & East. R. R. Co., and *for mail*, 2 Sheridan St., Auburn, N. Y.
- DYER, Robert M. (1892; 1904), V. P. and Treas., Puget Sound Bridge & Dredging Co., 432-441 Central Bldg., and 3002 Cascadia Ave., Seattle, Wash.
- EARLE, Edgar P. (1889; 1905), Pres., Earle Gear & Mch. Co., Stenton and Wyoming Aves., Wayne Junction, Philadelphia, and *for mail*, 23d St., near Graver's Lane, Chestnut Hill, Philadelphia, Pa.
- EARLE, Samuel Broadus (1905; Associate, 1908), Dir. Engrg. Dept., Prof. Mech. and Elec. Engrg., Clemson College, Clemson College, S. C.
- EASBY, Francis H. (1888), 3316 Powelton Ave., Philadelphia, Pa.
- EARLL, Chas. Isaac (1892), 11 Broadway, and 159 W. 105th St., New York, N. Y.
- EASTHOPE, Joseph (1906), M. M., Ill. Steel Co.'s South Wks., and *for mail*, 7534 Saginaw Ave., Chicago, Ill.
- EASTMENT, Wm. H. (Junior, 1896), Engr., B. Altman & Co., 5th Ave. and 34th St., New York, and Glen Cove, L. I., N. Y.
- EATON, Charles Edwin (1905), Eaton & Brownell, 70 Smith Bldg., and 1157 State St., Watertown, N. Y.
- EATON, Henry Chas. (Associate, 1908), Foreman Engrg. Dept., Waltham Watch Co., Waltham, Mass.
- EATON, Russell Wm. (1894), Agt., Cabot Mfg. Co., and 17 Federal St., Brunswick, Me.
- EAYRS, Thomas C. (Junior, 1905), Mgr. Ry. and Ltg. Dept., Westinghouse Elec. & Mfg. Co., 27 Woodward Ave., and 311 Montclair Ave., Detroit, Mich.
- EBERHARDT, Frank Edward (Junior, 1907), V. P. and Treas., Newark Gear Cutting Mch. Co., 69 Prospect St., and 113 Orchard St., Newark, N. J.
- EBERHARDT, Frederick L. (1899; 1902), Pres. and Genl. Mgr., Gould & Eberhardt, and *for mail*, 17 Hillside Ave., Newark, N. J.
- EBERHARDT, Henry J. (1902; 1906; 1912), Secy. and Designer, Newark Gear Cutting Mch. Co., 69 Prospect St., and 326 Sanford Ave., Newark, N. J.
- ECKART, W. R. (1882), Vice-President, 1883-1885; Cons. Engr., 3014 Clay St., San Francisco, Cal.
- ECKART, W. R., Jr. (1904), Prof. Mech. Engrg., Leland Stanford Jr. Univ., Stanford University P. O., and *for mail*, 1370 Bryant St., Palo Alto, Cal.
- EDEN, Louis E. (Associate, 1909), Mech. and Advisory Engr. with Cass Gilbert, 11 E. 24th St., New York, N. Y., and Washington Park, Hasbrouck Heights, N. J.

- EDGAR, Charles Leavitt (1910), Pres. and Genl. Mgr., Edison Elec. Ill. Co. of Boston, 70 State St., Boston, Mass.
- EDISON, Thos. A. (1880; Honorary, 1904), Inventor, West Orange, N. J.
- EDWARDS, Samuel H. (1912), Genl. Supt., Tide Water Oil Co., and *for mail*, 76 W. 35th St., Bayonne, N. J.
- EDWARDS, Victor E. (1889; 1890), Life Member; V. P., Morgan Constr. Co., 21 Lincoln St., Sta. A, Worcester, Mass.
- EDWARDS, William B. (1911), Mech. Engr., The S. O. & C. Co., Ansonia, and *for mail*, 17 E. 9th St., Derby, Conn.
- EGAN, Thomas P. (1903), Pres., J. A. Fay & Egan, John and Front Sts., and *for mail*, Edge Cliff Point Rd., Cincinnati, O.
- EGBERT, Chas. Coggill (1906), Cons. Engr., 153 Gluck Bldg., and 623 Buffalo Ave., Niagara Falls, N. Y.
- EBBETS, C. J. (1890), Mech. Engr. and Pat. Expt., Colt's Pat. Fire Arms Mfg. Co., and 12 Vernon St., Hartford, Conn.
- EHLERS, Henry Edward (1912), Prof. Exper. Engrg., Univ. of Pa., Philadelphia, and *for mail*, 107 Merion Ave., Narberth, Pa.
- EHLERS, Peter (1890), Ch. Engr., Wm. I. McCahan Sugar Refining Co., foot of Tasker St., and *for mail*, 3227 N. 17th St., Philadelphia, Pa.
- EHRMANN, Carl (Junior, 1911), Sales Engr., 2 Rector St., and *for mail*, 969 Madison Ave., New York, N. Y.
- EHRMANN, John P. (Junior, 1903), Hanna Mfg. Co., Federal and Front Sts., Troy, and Collins House, Watervliet, N. Y.
- EICHLER, Walter G. (Junior, 1912), Asst. Mech. Engr. Worsted Dept., Pacific Mills, and *for mail*, 203 Haverhill St., Lawrence, Mass.
- EIFFEL, Gustave (Honorary, 1889), 1 Rue Rabelais, Paris, France.
- EILERS, Karl Emrich (1890; 1904), Am. Smelting & Refining Co., 165 Broadway, and *for mail*, 435 Riverside Drive, New York, N. Y.
- EINIG, Alvin Bart (Junior, 1912), The Motch & Merryweather Mchy. Co., and *for mail*, 2278 E. 87th St., Cleveland, O.
- EINSTEIN, Alfred Charles (Associate, 1905), First V. P. and Genl. Mgr., Union Elec. Light & Power Co., and Pres. and Genl. Mgr., St. Louis County Gas & Elec. Co.'s and Suburban Elec. Light & Power Co., 12th and Locust Sts., and 5042 Washington Ave., St. Louis, Mo.
- EKSTRAND, Charles (1898; 1903), Mech. Engr., Warner Quinlan Asphalt Co., 79 Wall St., New York, N. Y., and *for mail*, The Park, Boonton, N. J.
- EKSTRAND, L. M. (1907), Engr. Chicago Dist., Am. Steel & Wire Co., and *for mail*, 131 Lenox Ave., Waukegan, Ill.
- ELDER, Hugh M. (1912), Genl. Power Engr., Am. Loco. Co. of N. Y., and 1715 Park Ave., Richmond, Va.
- ELDRED, Byron E. (1899; 1903), Pres., Commer.-Research Co., Lab., Tuckahoe, and *for mail*, 170 W. 73d St., New York, N. Y.

- ELDREDGE, A. H. (1894), Cons. Engr., N. E. States Office, North Packing & Provision Co., Somerville, and *for mail*, 93 Laurel St., Melrose, Mass.
- ELLICOTT, Edw. Beach (1903), Elec. Engr., Sanitary Dist. of Chicago, 1500 Am. Trust Bldg., and *for mail*, 6229 Winthrop Ave., Chicago, Ill.
- ELLIOTT, Ben. G. (Junior, 1911), Fellow in Mech. Engrg., Univ. of Wis., Engrg. Bldg., and *for mail*, 202 Prospect Ave., Madison, Wis.
- ELLIOTT, Elmer G. (1907), Mech. Engr., Am. Smelting & Refining Co., Hayden, Ariz., and *for mail*, 1109 Oak St., Oakland, Cal.
- ELLIOTT, Thomas (1904), Ch. Engr., 1312 Traction Bldg., and 354 Shiloh St., Cincinnati, O.
- ELLIOTT, W. E. (1889), Suptg. Engr., Goodrich Transit Co., Chicago, Ill.
- ELLIS, Frank I. (1907), Ch. Engr., United Engrg. & Fdy. Co., 2312 Farmers' Bank Bldg., and *for mail*, 723 N. St. Clair St., Pittsburgh, Pa.
- ELLIS, Halcolm (1911), Genl. Mgr., Ellis Adding-Typewriter Co., Elizabeth and Hawthorne Aves., Newark, and 17 S. Arlington Ave., East Orange, N. J.
- ELLIS, Humphrey Alfred (1912), Genl. Supt., Orenstein-Arthur Koppel Co., Koppel, Pa.
- ELLIS, Weldon T. (1908; 1912), Asst. Prof. Mech. Engrg., N. C. College of Agri. and Mech. Arts, West Raleigh, N. C.
- ELLISON, Lewis Martin (Associate, 1911), Steam Expt., Designer and Mfr., 6238 Princeton Ave., Chicago, Ill.
- ELMER, Wm. (Junior, 1896), Supt. M. P., Pa. R. R., 622 Brisbane Bldg., Buffalo, N. Y.
- ELMES, Chas. W. (1904), Pres., Chas. F. Elmes Engrg. Wks., Morgan and Fulton Sts., and 2922 Prairie Ave., Chicago, Ill.
- ELROD, H. E. (1911), 905 Southwestern Life Bldg., Dallas, Tex.
- ELY, Sumner Boyer (1896; 1901), V. P., Chester B. Albree Iron Wks. Co., and 5122 Pembroke Pl., Pittsburgh, Pa.
- ELY, Theo. N. (1880), Manager, 1880-1882; Vice-President, 1882; Ch. of M. P., Pa. R. R., Ret., Philadelphia, and *for mail*, Bryn Mawr, Pa.
- ELY, Wm. Grosvenor (1893; 1901), Supt. Constr., Genl. Elec. Co., and *for mail*, Lenox Rd., Schenectady, N. Y.
- EMENY, Fred'k James (Associate, 1899), Ch. Engr., The Deming Co., and *for mail*, 459 Cleveland Ave., Salem, O.
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- EMERSON, Harrington (1899), Stand. Practice and Efficiency Engr., 1522-1524 Hudson Terminal Bldg., 30 Church St., New York, N. Y., and 424 McCormick Bldg., Chicago, Ill.
- EMERY, Albert H. (1880), Civ. and Mech. Engr., 788 Main St., Stamford, and Glenbrook, Conn.
- EMMET, W. L. R. (1902), Engr. Ltg. Dept., Genl. Elec. Co., and 48 Washington Ave., Schenectady, N. Y.

- EMORY, Frederick L. (1894), Life Member; Prof. Mech. and Applied Mathematics, W. Va. Univ., Morgantown, W. Va.
- EMRIE, Almon (1898), 5337 Madison Ave., Chicago, Ill.
- EMSWILER, John Edward (Junior, 1908), Asst. Prof. Mech. Engrg., Univ. of Mich., New Engrg. Bldg., and 727 Forest Ave., Ann Arbor, Mich.
- ENGEL, Godfrey (1892), Constr. Engr., Am. Sugar Refining Co. of N. Y., foot of S. 4th St., and 126 Winthrop St., Brooklyn, N. Y.
- ENGEL, Louis G. (1887), Hotel Bossert, Montague and Hicks Sts., Brooklyn, N. Y.
- ENGLISH, Harry K. (Associate, 1908), Secy. and Ch. Engr., Ottumwa Iron Wks., and 135 E. Maple Ave., Ottumwa, Ia.
- ENGLISH, William T. (1902), Pres., Walworth-English-Flett Co., 100 Pearl St., Boston, and 1377 River St., Hyde Park, Mass.
- ENNIS, Herbert Vrooman (Junior, 1910), Engrg. Dept., Am. Car & Fdy. Co., New York, N. Y., and *for mail*, 543 Broadway, Paterson, N. J.
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- ENNIS, William Duane (1898; 1907), Prof. Mech. Engrg., Poly. Inst. of Brooklyn, Brooklyn, N. Y.
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- ENTREKIN, Norman Reese (1906), Genl. Supt., Worth Bros. Co., and *for mail*, 567 Chestnut St., also P. O. Box 760, Coatsville, Pa.
- EPPLE, Edward C. (Junior, 1908), Engr., Turner Constr. Co., 11 Broadway, New York, N. Y., and *for mail*, 250 Central Ave., Jersey City Heights, N. J.
- ERICSON, John Ernst (1909), City Engr., and Chairman Subway and Harbor Com., City of Chicago, City Hall Sq. Bldg., and 848 Lakeside Pl., Chicago, Ill.
- ERLANDSON, Emil William (Junior, 1912), Charge of Engrg., Mass. Fan Co., Watertown, and *for mail*, 85 Tolman St., West Newton, Mass.
- ERLENKOTTER, Walter (Junior, 1912), Fuel Engrg. Chem., Stand. Testing Lab. of City of N. Y., 127 Franklin St., New York, N. Y.
- ERNSBERGER, Millard Clayton (1910), Prof. Mech. Engrg., Univ. of Rochester, and 90 Park Ave., Rochester, N. Y.
- ERNST, Alfred F. (Junior, 1909), M. M., Brighton Mills, and *for mail*, 157 Meade Ave., Passaic, N. J.
- ERRINGTON, Franklin A. (1906), Cons. Mech. Engr. and Mfr. Mch. Tools, 39 Cortlandt St., New York; Lab., 24 Norwood Ave., and *for mail*, 31 Townsend Ave., Stapleton, S. I., N. Y.
- ERSKINE, John Stevenson (Junior, 1912), Draftsman Gasoline Eng. Dept., Internatl. Harvester Co., and *for mail*, 654 Greenfield Ave., Milwaukee, Wis.
- ERWIN, William W. (1910), N. Y. Edison Co., 55 Duane St., New York, N. Y.

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- ESTABROOK, Mansfield (Junior, 1903), Niles-Bement-Pond Co., 111 Broadway, New York, N. Y.
- ESTES, William Wood (1891; 1904), Designer, Genl. Fire Extinguisher Co., and *for mail*, 245 Waterman St., East Side Sta., Providence, R. I.
- ESTRADA, E. Duque (1893), Ch. Engr., Div. of Shops and Mchy., Maestranza, Havana, Cuba.
- ESTRADA, Rafael (1904), Cons. Engr., Calzada 78 B, Vedado, Havana, Cuba.
- EVANS, Henry O. (1896), Contr. and Designing Engr. Automatic Mchy.; M. E. Abram Cox Stove Co., and *for mail*, St. James Annex, Walnut and Camac Sts., Philadelphia, Pa.
- EVANS, Quimby N. (1891), Member of Firm, Evans, Almirall & Co., Clark and Dominick Sts., New York, and *for mail*, 371 Sterling Pl., Brooklyn, N. Y.
- EVANS, William Francis (1897), Mech. and Production Engr., Deere & Co., and *for mail*, 2001 Seventh Ave., Moline, Ill.
- EVANS, William Penn (1907), Mech. Engr., Baldwin Loco. Wks., and The Clinton, S. 10th and Clinton Sts., Philadelphia, Pa.
- EWEN, John Meiggs (1887), Cons. Engr., Pres., John M. Ewen Co., 525 Rookery Bldg., Pres., Stand. Alcohol Co., and 70 Bellevue Pl., Chicago; also, Lake Forest, Ill.
- EYERMANN, Peter (1908), Engr. of Constr., Witkowitz Steel Wks., Witkowitz, Austria.
- EYNON, Thomas M. (1902), Pres., Eynon-Evans Mfg. Co., 15th and Clearfield Sts., and 1426 Allegheny Ave., Philadelphia, Pa.
- FABENS, Andrew Lawrie (Junior, 1911), Supt., No. Aluminum Co., Ltd., Sterling Rd., Toronto, Ont., Canada.
- FABER, John Pelham (Junior, 1908), Westinghouse, Church, Kerr & Co., 10 Bridge St., New York, N. Y., and *for mail*, Dunellen, N. J.
- FABER DU FAUR, Adolph (1880), Life Member; 58 Seymour Ave., Newark, N. J.
- FAIG, John T. (1897; 1905), Prof. Mech. Engrg., Univ. of Cincinnati, and 3345 Whitfield Ave., Cincinnati, O.
- FAILE, E. H. (Junior, 1907), Supvg. Engr., Adams Express Bldg. Co., 141 Broadway, and *for mail*, 220 W. 110th St., New York, N. Y.
- FAIRBANKS, Robert Noyes (Associate, 1895), Dir., Dutilh-Smith, McMillan & Co., 29 Great St. Helens, E. C., London, England.
- FAIRFIELD, Howard P. (1901), Instr., Worcester Poly. Inst., and *for mail*, 1 Dayton St., Worcester, Mass.
- FALKENAU, Arthur (1886), Industrial and Cons. Engr., 165 Broadway, and *for mail*, 911 Park Ave., New York, N. Y.
- FALLON, John (Junior, 1910), Cons. Engr., Union Stock Yards, Chicago, Ill.
- FALLON, John B. (Junior, 1905), Treas., Stickney & Poor Spice Co., 184 State St., and 138 Marlboro St., Boston, Mass.

- FANNON, Wm. A. (1907), Mgr., Interlake Pulp & Paper Co., and *for mail*, 460 Alton St., Appleton, Wis.
- FARMER, John T. (Junior, 1902), Mech. and Hyd. Engr., 427 Coristine Bldg., Montreal, and 534 Lansdowne Ave., Westmount, P. Q., Canada.
- FARMER, Thos. (1891), Warner & Swasey Co., and *for mail*, 100 Melbourne Ave., Detroit, Mich.
- FARQUHAR, Edmund Henry (1910), Supt., Genl. Elec. Co., Schenectady, N. Y.
- FARQUHAR, Francis (1907), Genl. Mgr., A. B. Farquhar Co., Ltd., York, Pa.
- FARRAND, Dudley (1895; 1905), Genl. Mgr., Pub. Service Elec. Co., 759 Broad St., and 49 Lincoln Park, Newark, N. J.
- FARRAR, Chas. O. (1902), Supt. Constr., Otis Elev. Co., 34 India St., and *for mail*, 10 Thurston St., Winter Hill Sta., Boston, Mass.
- FARRAR, Edward (1907), Cons. Mech. Engr., Genl. Min. and Finance Corp., and *for mail*, Box 1242, Johannesburg, Transvaal, S. A.
- FARRELL, Harry C. (1908), Mech. Engr., United Shoe Mchy. Co., Beverly, and *for mail*, 48 Grant Rd., Swampscott, Mass.
- FARRELL, W. Elliston (1900), V. P., Treadwell Engrg. Co., Easton, Pa.
- FARRINGTON, Thos. H. (Junior, 1912), Secy., Treas., Geo. Merritt Ward, Inc., 5-7 E. 42d St., New York, and Owego, Tioga Co., N. Y.
- FAST, Jacob J. (Associate, 1912), Designer of Mchy. for Movable Bridges, Waddell & Harrington, 1012 Baltimore Ave., Kansas City, Mo.
- FAULKNER, David Sinclair (Junior, 1912), Otto Gas Eng. Wks., 15-17 S. Clinton St., Chicago, Ill.
- FASSETT, Francis Keith (1912), Inventor, Designer and Pat. Atty., 1309 U. B. Bldg., Dayton, O.
- FAULL, Richard (1907), Mech. Engr., Tenn. Coal, Iron & R. R. Co., and 1501 Minnesota Ave., Bessemer, Ala.
- FAWCETT, Wallace H. (Junior, 1903), 1002 Old Natl. Bank Bldg., Spokane, Wash.
- FEAGLES, Ralph L. (1912), Deister Mch. Co., Schoaff Bldg., Fort Wayne, Ind.
- FEICHT, Edward R. (Junior, 1907), Ch. Engr., Sacramento Valley Sugar Co., Hamilton City, Cal.
- FEIKER, Fred Morris (Associate, 1912), Managing Editor, Factory, and Book Dept., The System Co., Chicago, and *for mail*, 1612 Forest Ave., Wilmette, Ill.
- FEKETTE, Stephen I. (Junior, 1910), Engrg. Dept., Hudson Motor Car Co., and 743 Waterloo St., Detroit, Mich.
- FELDMAN, Abram Meyer (1900), Cons. Engr., 120 Liberty St., and 241 W. 142d St., New York, N. Y.
- FELLOWS, Edwin R. (1898), Mgr., The Fellows Gear Shaper Co., Springfield, Vt.

- FELTHOUSEN, John H. (1896), Hyd. and Mech. Engr., S. Morgan Smith Co., and *for mail*, Linden Ave. and West St., York, Pa.
- FELTON, Edgar Conway (1885), Manager, 1898-1901; Pres., Penn Steel Co., Morris Bldg., Philadelphia, and *for mail*, Haverford, Pa.
- FENN, Robert Willson (1910), Mgr. Mfg. Dept., Union Oil Co. of Cal., Mills Bldg., San Francisco, Cal.
- FENNELL, Benjamin C. (Junior, 1902), Contr. and Engr., Empire Bldg., Atlanta, Ga.
- FENNER, David C. (1906), 1764 Broadway, New York, N. Y., and 1200 Denmark Rd., Plainfield, N. J.
- FENNER, Herbert N. (Associate, 1891), Pres., N. E. Butt Co., and 74 Cooke St., Providence, R. I.
- FERGUS, William L. (1903; 1906), W. L. Fergus & Co., 1509 Fisher Bldg., and 4030 Clarendon Ave., Chicago, Ill.
- FERGUSON, Geo. R. (1890), Asst. Engr., Dept. of Bridges, 179 Washington St., Brooklyn, N. Y.
- FERGUSON, Hardy Smith (1899), Cons. Engr., 200 Fifth Ave., New York, N. Y.
- FERGUSON, J. W. (1891), Engr. and Bldg. Contr., 152 Market St., and 12th and 28th St., Paterson, N. J.; also, 253 Broadway, New York, N. Y.
- FERGUSON, Milford B. (1912), Supt., Thos. F. Condon & Co., Bush Terminal, and *for mail*, 1707 E. 14th St., Brooklyn, N. Y.
- FERGUSON, W. Craig (Junior, 1912), Asst. Genl. Mgr., The Gilbert Hunt Co., and *for mail*, Box 486, Walla Walla, Wash.
- FERMIER, Emile J. (1908), Prof. Mech. Engrg., Agri. and Mech. College of Tex., College Sta., Tex.
- FERNALD, Robt. H. (1900; 1903), Whitney Prof. Dynamical Engrg., Univ. of Pa., and Cons. Engr., U. S. Bureau of Mines, Philadelphia, and 6386 Woodbine Ave., Overbrook, Philadelphia, Pa.
- FERRIER, Walter (1908), Asst. Supt., Am. Vanadium Co., Bridgeville, and 814 Wager St., Munhall, Pa.
- FERRIS, Charles Edward (1904), Prof. Mech. Engrg., Univ. of Tenn., and 1312 White Ave., Knoxville, Tenn.
- FERRIS, Walter (1907), Ch. Engr., Bucyrus Co.; South Milwaukee, and *for mail*, 710 Prospect Ave., Milwaukee, Wis.
- FESSENDEN, Chas. Horace (Junior, 1909), Asst. Prof. Mech. Engrg., Univ. of Mich., 333 New Engrg. Bldg., and 727 Forest Ave., Ann Arbor, Mich.
- FESSENDEN, Edwin Allan (Junior, 1908), Assoc. Prof. Mech. Engrg., Univ. of Mo., and *for mail*, 1331 Ross St., Columbia, Mo.
- FICKES, Edwin S. (Associate, 1902), Engr. and Pur. Agt., Aluminum Co. of Am., and *for mail*, 6316 Bartlett St., Pittsburgh, Pa.
- FICKINGER, P. J. (1888), Mech. Engr., P. & C. Dock Co., Conneaut, O.

- FIELD, Freeman (Associate, 1910), V. P. and Treas., Sheffield Gas Power Co., and 40 E. Concord Ave., Kansas City, Mo.
- FIEUX, Ernest D. (Junior, 1907), Pres. and Treas., L. J. Wing Mfg. Co., 352-362 W. 13th St., and *for mail*, 450 W. 147th St., New York, N. Y.
- FILLINGHAM, Myles Percy (1908), Cons. and Contr. Engr., Hudson Terminal Bldg., 50 Church St., New York, N. Y., and 104 N. Cliff St., Ansonia, Conn.
- FINCH, Ellis Jerome (Junior, 1911), 260 W. 136th St., New York, N. Y.
- FINLEY, A. D. (1898; Associate, 1903), Designing Engr., Russell, Burdsall & Ward Bolt & Nut Co., and *for mail*, 206 Leicester St., Fairmont Park, Port Chester, N. Y.
- FIRESTONE, Sigmund (1912), Cons. Mech. and Elec. Engr., Granite Bldg., and 293 Dartmouth St., Rochester, N. Y.
- FIRMSTONE, Frank (1880), Easton, Pa.
- FIRTH, William Edgar (1893), Safety Engr., Midvale Steel Co., Box 1606, Philadelphia, and 400 W. Cheltenham Ave., Germantown, Philadelphia, Pa.
- FISCHER, Ad. Koerting (1904), Pres., Schutte & Koerting Co., 12th and Thompson St., and *for mail*, 6904 Wissahickon Ave., Philadelphia, Pa.
- FISH, Charles H. (1891), 85 Devonshire St., and *for mail*, P. O. Box 1593, Boston, Mass.
- FISHER, Elbert C. (Junior, 1891), V. P. and Genl. Mgr., Wickes Boiler Co., and 308 N. Jefferson Ave., Saginaw, Mich.
- FISHER, Henry Donald (Junior, 1907), Fuel Testing Co., 220 Devonshire St., Boston, and 338 Lake Ave., Newton Highlands, Mass.
- FISHER, Howard Colburn (Junior, 1912), Ch. Engr., Sayles Bleacheries, and *for mail*, 218 Walker St., Saylesville, R. I.
- FISHER, John (1910), Ch. Engr. Hartford Dist., The Conn. Co., and *for mail*, 45 Webster St., Hartford, Conn.
- FISHER, Lieut. Joseph Otto (Junior, 1910), U. S. Navy, U. S. S. North Dakota, care of Postmaster, New York, N. Y., and *for mail*, 500 Main St., Lewiston, Me.
- FISHER, Wm. Wallace (Junior, 1910), Asst. Engr., Royden Marble Mch. Co., 220 Fifth Ave., New York, and *for mail*, 1783 Bedford Ave., Brooklyn, N. Y.
- FITCH, Alfred Lyon (Associate, 1907), 1132 E. 45th St., Chicago, Ill.
- FITCH, Claude E. (1902), Cons. Mech. Engr., V. P., Allen Engrg. Co., 1233 First Natl. Bank Bldg., Chicago, and *for mail*, 1033 Elmwood Ave., Wilmette, Ill.
- FITZ, Ervin M. (Junior, 1901), Elec. Engr. M. P. Dept., Pa. Lines West of Pittsburgh, New First Natl. Bank Bldg., and 35 N. 9th St., Columbus, O.
- FITZGERALD, Charles (1912), Mgr. Sales and Asst. Genl. Mgr., Pittsburgh Valve Fdy. & Constr. Co., and *for mail*, 6361 Jackson St., Pittsburgh, Pa.

- FITZGIBBONS David (1912), V. P. and Genl. Mgr., Fitzgibbons Boiler Co., Oswego, N. Y.
- FLAD, Edward (1891), Cons. Engr., Fullerton Bldg., and 5575 Waterman Ave., St. Louis, Mo.
- FLADD, Frederick C. (1887), Traveling and Cons. Engr., E. W. Bliss Co., 17 Adams St., and *for mail*, 169 Quincy St., Brooklyn, N. Y., and New Canaan, Conn.
- FLAGG, Samuel B. (Junior, 1907), Engr., U. S. Bureau of Mines, 40th and Butler Sts., Pittsburgh, and 430 South Ave., Wilkesburg, Pa.
- FLAGG, Stanley G., Jr. (1891), Manager, 1910-1913; S. G. Flag & Co., Morris Bldg., 1421 Chestnut St., Philadelphia, Pa.
- FLANDERS, Ralph E. (Associate, 1908), Mgr. of Fay Lathe, Jones & Lamson Mch. Co., and *for mail*, 41 Pleasant St., Springfield, Vt.
- FLANNERY, John M. (1907), Solvay Process Co., and *for mail*, 1628 W. Genesee St., Syracuse, N. Y.
- FLATHER, Frederick A. (1892), Treas., Boott Mills, 79 Milk St., Boston, and *for mail*, 68 Mansur St., Lowell, Mass.
- FLATHER, John J. (1889), Prof. Mech. Engrg., Univ. of Minn., and *for mail*, 315 11th Ave., S. E., Minneapolis, Minn.
- FLEMING, Henry Stuart (1903), Cons. Engr., 1 Broadway, and 2 E. 65th St., New York, N. Y.
- FLEMING, Wills M. (1905; 1909), Engr. in Charge Drawing Room, Deane Steam Pump Co., and *for mail*, 370 Maple St., Holyoke, Mass.
- FLETCHER, Andrew (1893), Pres. and Treas., W. & A. Fletcher Co., Hoboken, N. J., and Glen Cove, L. I., N. Y.
- FLETCHER, E. Leslie (1909), Pres., Fletcher Engrg. Co., Odd Fellows Bldg., and 1254 E. Main St., Bridgeport, Conn.
- FLETCHER, James R. (1906), Genl. Supt., P. & F. Corbin Mfg. Co., and *for mail*, 80 Russell St., New Britain, Conn.
- FLETCHER, W. H. (1899), V. P., W. & A. Fletcher Co., North River I. W., Hudson St., 12th to 14th Sts., Hoboken, N. J., and 271 W. 90th St., New York, N. Y.
- FLETEMEYER, Louis H. (Junior, 1906), Mech. Engr., 163 Grenadier Rd., Toronto, Ont., Canada.
- FLICKINGER, Harrison William (Junior, 1911), Estimator, Thompson-Starrett Co., Second Natl. Bank Bldg., and 256 Bellefield Ave., Pittsburgh, Pa.
- FLINN, Charles Forrest (Associate, 1905), Supt., L. E. White Lumber Co., Balboa Bldg., San Francisco; and Elk, Mendocino Co., Cal.
- FLINN, Thos. C. (1906), Genl. Supt., Kennedy Valve Mfg. Co., P. O. Box 65, and 107 Columbia St., Elmira, N. Y.
- FLINN, Thomas F. (1892), Mech. Engr., 72 Second Pl., Brooklyn, N. Y.
- FLINT, Bertram Pierpont (1894), McIntosh, Seymour & Co., 50 Church St., New York, N. Y.

- FLINT, William P. (1903), Engr. Gas Eng. Dept., Westinghouse Meh. Co., East Pittsburgh, and *for mail*, 5623 Wellesley Ave., Pittsburgh, Pa.
- FLORY, Burton P. (1906), Supt. M. P., Ont. and West. Ry. Co., Middletown, N. Y.
- FOGARTY, William James (1911), Mech. Engr., Barney & Smith Car Co., and *for mail*, 74 Fountain Ave., Dayton, O.
- FOGG, Oscar H. (Associate, 1907), Engr., Consld. Gas Co., of N. Y., 128 E. 15th St., New York, N. Y.
- FOGLER, Ben Baker (Junior, 1912), Engr., Ludlow Mfg. Associates, and *for mail*, Lock Box 88, Ludlow, Mass.
- FOLEY, Leonard H. (Junior, 1912), Foreman Drafting Room Sta. Engrg. Dept., Edison Elec. Ill. Co. of Boston, Boston, and *for mail*, 52 W. Central St., Natick, Mass.
- FOLEY, Walter J. (Junior, 1910), Engr., San Francisco Bridge Co., 865 Monadnock Bldg., and *for mail*, 2368 Broadway, San Francisco, Cal.
- FOLLER, Chas. S. (1906), West. Sales Mgr., Union Spring & Mfg. Co., 1322 Central Natl. Bank Bldg., and 4605 Maryland Ave., St. Louis, Mo.
- FONDA, Burton Colburn (Junior, 1912), Student Engr., Genl. Elec. Co., and *for mail*, 45 Front St., Schenectady, N. Y.
- FOOTE, Andrew W. (1900), Pres., Foote Burt Co., 4100-4109 St. Clair St., Cleveland, and Gates Mills, Cuyahoga Co., O.
- FORAN, George Jesse (1887; 1893), Mgr. Condenser Dept., Internatl. Steam Pump Co., and *for mail*, 471 Central Park W., New York, N. Y.
- FORBES, Harry Rogers (Associate, 1911), East. Rep., Lumen Bearing Co., Rm. 573, 50 Church St., New York, N. Y.
- FORD, Bruce (1907), Engr., Elec. Storage Battery Co., 19th St. and Allegheny Ave., Philadelphia, and 25 Summit St., Chestnut Hill, Philadelphia, Pa.
- FORD, John D. (1884), Rear Admiral, U. S. N., 2319 Maryland Ave., Baltimore, Md.
- FORD, William Lucas (1911), N. E. Sales Mgr., Murphy Iron Wks. of Detroit, Mich., Rm. 520, 35 Federal St., Boston, Mass.
- FORDYCE, John R. (1899), Pres., Thomas-Fordyce Mfg. Co., and 2115 Broadway, Little Rock, Ark.
- FORGY, J. Edmonds (Junior, 1906), Ch. Engr., Charles Warner Co., Du Pont Bldg., Wilmington, Del.
- FORREST, George Munro (1912), Engr., Union Typewriter Co., 293 Broadway, New York, N. Y.
- FORSBURG, Henry A. (1911), Genl. Supt. Trunk Lines, Stand. Oil Co. of Cal., and *for mail*, 1616 Josephine St., Berkeley, Cal.
- FORSTALL, Alfred E. (1899), Cons. Engr., 84 William St., New York, N. Y., and Montclair, N. J.
- FORSYTH, Robert (1881), Manager 1891-1894; Cons. Engr., 1159 The Rookery, Chicago, Ill.
- FORSYTH, Robert (1901), Cons. Engr., 1996 Green St., San Francisco, Cal.

- FORSYTH, William (1883), Manager, 1888-1891; Mech. Engr., Windermere Hotel, Chicago, Ill.
- FORTÉ, Harry Phidias (Junior, 1912), Mech. Engr., Beech-Nut Packing Co., Canajoharie, N. Y.
- FORTUNE, John Robert (1912), Ch. Engr., Murphy Iron Wks., and *for mail*, 297 E. Grand Blvd., Detroit, Mich.
- FOSTER, C. H. (1886), Treas., Tolhurst Mch. Wks., and *for mail*, 31 Belle Ave., Troy, N. Y.
- FOSTER, Ernest Howard (1885; 1894), V. P., Power Spec. Co., 111 Broadway, New York, N. Y.
- FOSTER, Horatio A. (1895), J. G. White & Co., Inc., 43 Exchange Pl., New York, and *for mail*, 381 S. Broadway, Yonkers, N. Y.
- FOSTER, Jed S. (1891; 1903), Engr., Lidgerwood Mfg. Co., 96 Liberty St., New York, N. Y., and Stoneleigh Park, Westfield, N. J.
- FOSTER, John Melville (1900), Pres. and Genl. Mgr., Foster Engrg. Co., 109 Monroe St., Newark, N. J., and Hotel Marie Antoinette, New York, N. Y.
- FOSTER, Rufus J. (Associate, 1890), V. P., Internatl. Text Book Co., Mgr., Mines and Minerals, Wyoming Ave., and 807 Clay Ave., Scranton, Pa.
- FOSTER, William B. (1908), Supt. and Ch. Engr., Foster Bros. Mfg. Co., and 79 Oneida St., Utica, N. Y.
- FOWLER, Geo. L. (1886), Cons. Mech. Engr., 83 Fulton St., New York, N. Y.
- FOWLER, Wallace Sherman (Junior, 1912), Draftsman, McIntosh & Seymour Co., and *for mail*, 38 Chedell Pl., Auburn, N. Y.
- FOX, Charles H. (1900), Pres., Ahrens-Fox Fire Eng. Co., Alfred and Cook Sts., Cincinnati, and *for mail*, 3547 Shaw Ave., Hyde Park, Cincinnati, O.
- FOX, Sir Douglas (Honorary, 1900), Head of Firm, Messrs. Sir Douglas Fox and Partners, 56 Moorgate St., London, E. C., and Kippington Grange, Sevenoaks, Kent, England.
- FOX, John Herbert (1904), Ch. Engr., Pittsburgh Plate Glass Co., Frick Bldg., Pittsburgh, Pa.
- FOX, Royal E., Jr. (1901; 1911), V. P., The Engr. Co., Rm. 1180, 50 Church St., and Irving Arms, 222 Riverside Drive, New York, N. Y.
- FOX, William (1900), Assoc. Prof. Physics, College of the City of N. Y., 139th St. and Convent Ave., and *for mail*, 575 W. 183d St., New York, N. Y.
- FRANCIS, Charles A. (Associate, 1906), Sachs Labs., Inc., Hartford, Conn.
- FRANCIS, Isaac Hathaway (1911), Cons. Engr., 1508 Commonwealth Trust Bldg., Philadelphia, and Grant and Milnor Sts., Torresdale, Philadelphia, Pa.
- FRANCIS, W. H. (1884), Union League, Broad and Sansom Sts., Philadelphia, Pa.

- FRANCISCO, Ferris L. R. (1906; 1912), Cons. Engr., Rm. 1252, 200 Fifth Ave., New York, N. Y., and 416 Bergen Ave., Jersey City, N. J.
- FRANK, Edwin (Junior, 1909), 2300 Grand Ave., Milwaukee, Wis.
- FRANKENBERG, George T. (Associate, 1907), Supt., The Columbus Brass Co., 540 Dublin Ave., and Normandie Hotel, Columbus, O.
- FRANKS, Fredk. B. (1904), Mgr. Operating and Constr. Cement Plant, Bath Portland Cement Co., Bath, Pa.
- FRANZ, Walter G. (1907), Cons. Engr., Union Trust Bldg., and 2613 Eden Ave., Cincinnati, O.
- FRASER, D. Ross (Junior, 1907), Chicago Portland Cement Co., Oglesby, Ill.
- FRASER, Norman D. (1886), Pres., Chicago Portland Cement Co., 30 N. La Salle St., and *for mail*, 2928 Washington Blvd., Chicago, Ill.
- FRECHTLING, Arthur Geo. (Junior, 1906), Salesman, Fairbanks, Morse & Co., Seattle, and *for mail*, Box 392, Tacoma, Wash.
- FREDERICK, Floyd W. (1907), Prof. Mech. Engrg., Howard Univ., and *for mail*, 607 Taylor St., N. W., Washington, D. C.
- FREEMAN, Frederick Charles (Junior, 1911), Stacey Mfg. Co., and 404 Dortchester Ave., Cincinnati, O.
- FREEMAN, J. Porter (1908), Constr. Engr., Alex. Smith & Sons, and *for mail*, 225 Woodworth Ave., Yonkers, N. Y.
- FREEMAN, John R. (1887), Vice-President, 1902-1904; President, 1905; Cons. Engr., N. Y. Board of Water Supply, 165 Broadway, New York, N. Y., and Pres., Mfrs. Mut. Fire Ins. Co., and *for mail*, 815 Grosvenor Bldg., and res., 235 Arlington Ave., Providence, R. I.
- FREEMAN, Joseph Harlan (1912), Cons. Engr. and Mech. Expt., 45 Broadway, New York, and 61 Pierrepont St., Brooklyn, N. Y.
- FREEMAN, Perry John (Junior, 1908), Browning Engrg. Co., and *for mail*, 914 E. 150th St., Cleveland, O.
- FRENCH, Edward Vinton (1905), V. P. and Engr., Arkwright Mut. Fire Ins. Co., 31 Milk St., Boston, and 73 Bartlett St., Andover, Mass.
- FRENCH, Lester Gray (1899; 1912), Editor, Am.Soc.M.E., 29 W. 39th St., New York, and 70 Fisher Ave., White Plains, N. Y.
- FREVERT, H. F. (Associate, 1893), Pres. and Treas., Frevert Mchy. Co., 38 Vesey St., New York, N. Y.
- FREYN, Heinrich Josef Karl (1906), Cons. Engr., Allis-Chalmers Co., West Allis, and 459 Juneau Pl., Milwaukee, Wis.
- FRICK, Abraham O. (1885), Pres., The Frick Co., and *for mail*, Clayton Ave., Waynesboro, Pa.
- FRITH, Arthur J. (1894), Assoc. Prof. Mech. Engrg., Armour Inst. of Tech., 33d and Armour Aves., and 56 E. 36th Pl., Chicago, Ill.
- FRITZ, Aimé L. G. (Junior, 1907), Ch. Engr. and Genl. Mgr., L. I. Motor Truck Co., 6 Haven Pl., and *for mail*, 99 Elmwood St., Woodhaven, L. I., N. Y.

- FRITZ, John (1881; Honorary, 1900), Vice-President, 1882-1884; President, 1896; Cons. Engr., 155 Market St., Bethlehem, Pa.
- FROHWEIN, Richard W. (Junior, 1907), Pur. Agt., M. H. Treadwell Co., 140 Cedar St., New York, N. Y., and *for mail*, 431 Magie St., Elizabeth, N. J.
- FROST, Edward J. (1908), Pres. and Genl. Mgr., Frost Gear & Mch. Co., Horton and Tyson Sts., and 301 First St., Jackson, Mich.
- FROST, Harwood (1910), Pres. and Ch. Engr., Brown Portable Elev. Co., 10 S. La Salle St., and 4756 Kenmore Ave., Chicago, Ill.
- FROTHINGHAM, Francis Edward (1898; 1904), Engr., Perry, Coffin & Burr, 60 State St., and 22 Charles River Sq., Boston, Mass.
- FRY, Alfred Brooks (1892), Ch. Engr., U. S. Treas. Service, and Cons. Engr., Asso. for Protection of the Adirondacks, U. S. Custom House Bldg., New York, N. Y.
- FRY, Lawford H. (1905), Tech. Rep. in Europe, Baldwin Loco. Wks., 34 Victoria St., London, S. W., England.
- FRY, Thomas W. (1904), Secy. and Wks. Mgr., Sullivan Mchy. Co., Claremont, N. H.
- FRYER, Geo. G. (1891), Estimating Engr., The Solvay Process Co., and *for mail*, 203 Onondaga Ave., Syracuse, N. Y.
- FUCHS, Ernesto (1906), Engr. and Arch., 87 Progreso St., Guadalajara, Mex.
- FUCHS, Herman (1909), Mgr. Mexican Dept., Fairbanks, Morse & Co., 801 Clark Ave., and *for mail*, 3910 Cleveland Ave., St. Louis, Mo.
- FULENWIDER, Henry L. (1901), Wilmington, and New Castle, Del.
- FULLER, Allen Jenckes (1901), Supt., Bureau of Water, City Hall, and *for mail*, 3402 Baring St., Philadelphia, Pa.
- FULLER, Benjamin Delano (1910), Supt. of Foundries, Westinghouse Elec. & Mfg. Co., Cleveland and Allegheny City Wks., Box 382, Cleveland, and 1511 Ellbur Ave., Lakewood, O.
- FULLER, Charles Edward (1912), Prof. Theoretical and Applied Mechanics, Mass. Inst. of Tech., Boston, and Wellesley, Mass.
- FULLER, Floid M. (Junior, 1907), Cons. Engr., 812-814 Torrey Bldg., and Y. M. C. A., Duluth, Minn.
- FULLER, George W. (1910), Cons. Engr., 170 Broadway, New York, N. Y.
- FULLER, Col. James Wheeler, Jr. (1910), Pres., Lehigh Car, Wheel & Axle Wks., and *for mail*, cor. Bridge St., and Hometown Ave., Catasauqua, Pa.
- FULLER, Ray W. (Associate, 1909), Elec. Engr., 1530 Wyoming Ave., Scranton, Pa.
- FULTON, Arthur Oram (Junior, 1911), Sales Engr., Wheelock, Lovejoy & Co., Boston, and *for mail*, 21 Harrington St., Newtonville, Mass.

- FULWEILER, John Edwin (Junior, 1908), Member of Firm, Perkins, Fulweiler & Co., 400 Chestnut St., and 4335 Chestnut St., Philadelphia, Pa.
- FUNK, Nelson E. (1909), Cons. Engr., Pres. and Mgr., Funk Mch. Co., 1401 Clinton St., Hoboken, and 31 Forest St., Montclair, N. J.
- FUNK, Wm. Francis (1892; 1905), Secy., La Crosse Boiler Co., Gould and Mill Sts., and 1407 Main St., La Crosse, Wis.
- FURMAN, Franklin De R. (1902), Prof. Mechanism and Mch. Design, Stevens Inst. of Tech., Hoboken, N. J., and Hotel Earle, 103 Waverly Pl., New York, N. Y.
- GABRIEL, Charles R. (1901), Cons. and Designing Engr., E. W. Bliss Co., and *for mail*, 1810 Glenwood Rd., Ave. G, Brooklyn, N. Y.
- GABRIEL, Wm. A. (1891), Ch. Draftsman and Designer, Elgin Natl. Watch Co., and *for mail*, 570 Chicago St., Elgin, Ill.
- GAEHR, David (1902; 1909), Designing and Contr. Engr., 950-952 Rockefeller Bldg., Cleveland, O.
- GAGER, Edwin Baker, Jr. (Junior, 1912), Scientific Management Engr., Farrel Fdy. & Mch. Co., Ansonia, and 49 Atwater Ave., Derby, Conn.
- GAINES, Frederic F. (1901), Supt. M. P., Central of Ga. R. R., and 208 W. 36th St., Savannah, Ga.
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- GALLAGHER, Robert Thomas (1906), Ch. Draftsman Engrg. Dept., Am. Steel & Wire Co., and *for mail*, 12 Huntington Ave., Worcester, Mass.
- GALLOUPE, Francis E. (1880), Mech. Engr., 335 Old South Bldg., Boston, and 69 Puritan Rd., Swampscott, Mass.
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- GALLUP, David L. (1910), Asst. Prof. Gas Engrg., Worcester Poly. Inst., and 12 Shaffner St., Worcester, Mass.
- GAMBLE, William John (Junior, 1911), Mech. Engr., Vulcan Steam Forging Co., 247-253 Rano St., and 279 Hoyt St., Buffalo, N. Y.
- GAMON, Ernest E. (Junior, 1904), V. P. and Genl. Mgr., Gamon Meter Co., 282 South St., and *for mail*, 100 Murray St., Newark, N. J.
- GAMPER, Herman (1900), Genl. Mgr., Erie Ltg. Co., 21 W. 7th St., and 126 W. 4th St., Erie, Pa.
- GANTT, Henry L. (1888), Manager, 1908-1911; Cons. Engr., 2915 Singer Bldg., New York, N. Y., and 18 Hoburg Pl., Montclair, N. J.
- GANZ, Albert Frederick (1910), Prof. Elec. Engrg., Stevens Inst. of Tech., Hoboken, N. J.

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- GARCELON, Charles A., Jr. (Junior, 1902), North Lovell, Oxford Co., Me.
- GARDINER, Andrew J., Jr. (1906), Mgr. Ohio Sales Div., Landis Tool Co. of Waynesboro, Pa., Hollenden Hotel, Cleveland, O., and *for mail*, 66 S. Portage St., Westfield, N. Y.
- GARDNER, G. Clinton, Jr. (1903), Genl. Foreman M. P., Manhattan Div., Pa. R. R., Jersey City, and *for mail*, 568 Jefferson Ave., Elizabeth, N. J.
- GARDNER, H. C. (1904), Member of Firm, Brill & Gardner, 1135 Marquette Bldg., and Kenwood Hotel, Chicago, Ill.
- GARDNER, Henry (Junior, 1904), Supvr. Apprentices, N. Y. C. & H. R. R. R. Co., 1526 Grand Central Terminal, New York, and 102 Mamaroneck Ave., White Plains, N. Y.
- GARDNER, Kirtland C. (Associate, 1909), Sales Engr., 2311 Farmers Bank Bldg., and 6727 Thomas Blvd., Pittsburgh, Pa.
- GARDNER, Thomas M. (1903), Cons. Engr., Anna, Ill.
- GARFIELD, Alexander S. (1907), Ch. Engr., Cie. Française pour l'Exploitation des Procédés Thomson-Houston, and *for mail*, 67 Ave. de Malakoff, Paris, France.
- GARFIELD, Lyman Morse (Associate, 1893), Supt., Miami Powder Co., and *for mail*, 428 N. Galloway St., Xenia, O.
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- GARRED, Ulysses A. (1904; 1912), Mech. Supt., Anaconda Copper Min. Co., Anaconda, Mont.
- GARRETT, John Anthony (Junior, 1907), Gas and Mech. Engr., Fairbanks, Morse & Co., 423-429 E. 3d St., Los Angeles, Cal.
- GARRIGUES, Edmund (1900), Ch. Engr., The Russell & Co., and *for mail*, 223 S. Cedar St., Massillon, O.
- GARTLEY, Alonzo (1911), Cons. Engr., C. Brewer & Co., Ltd., Honolulu, Hawaii.
- GARVIN, George K. (1909), Pres., Garvin Mch. Co., Spring and Varick Sts., New York, N. Y.
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- GATELY, Philip J. (Associate, 1904), Ch. Engr., R. Webber's Packing House & Cold Storage Plant, 2191 Third Ave., and *for mail*, 125 E. 54th St., New York, N. Y.
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- GATES, Philetus W. (1902), Vice-President, 1906-1908; Pres., Hanna Engrg. Wks., 2059 Elston Ave., Chicago, Ill.
- GATES, Thayer P. (Junior, 1906), Sayles Bleacheries, and *for mail*, Orchard Ave., Saylesville, R. I.
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- GERMAIN, Joseph Napoleon (1911), Mech. Engr. of Maintenance, Genl. Elec. Co., and *for mail*, 1160 W. 9th St., Erie, Pa.
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- GERRY, Edward Murray (1912), Commer. Elec. Engr., Allis-Chalmers Co., and 1718 Wells St., Milwaukee, Wis.
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- GIFFORD, Byron T. (Junior, 1909), Mgr. Genl. Engrg. Dept., Am. Dist. Steam Co., 900 First Natl. Bank Bldg., and *for mail*, 1653 E. 55th St., Chicago, Ill.
- GIFFORD, Robt. L. (1902), Pres., Illinois Engrg. Co., Monadnock Bldg., Chicago, Ill., and Oak Knoll, Pasadena, Cal.
- GILBERT, E. E. (1911), Sales Mgr. Turbine Dept., Genl. Elec. Co., and 223 Union St., Schenectady, N. Y.
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- GILLET, Lowry (Junior, 1904), Steam Engr., Genl. Chem. Co., 25 Broad St., and 14 W. 69th St., New York, N. Y.
- GILLETTE, Halbert Powers (1910), Editor-in-Chief, Engineering and Contracting, 608 S. Dearborn St., Chicago, Ill., and Germantown, Pa.
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- GILLIS, Albert R. (1891), Asst. Engrg. Dept., Solvay Process Co., and 307 Emerson Ave., Syracuse, N. Y.
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- GILMORE, George Parley (1909), Mech. Engr., Am. Ptg. Co., and *for mail*, 109 Barre St., Fall River, Mass.

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- GLASGOW, Carr L. (Junior, 1904), Dist. Mgr., Allis-Chalmers-Bullock, Ltd., 613 Canadian Express Bldg., Montreal, P. Q., Canada.
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- GOLDEN, M. J. (1892), Prof. Practical Mechanics, Purdue Univ., Lafayette, Ind.
- GOLDIE, Alexander R. (Junior, 1902), Mgr., Goldie & McCulloch Co., Ltd., Galt, Ont., Canada.
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- GOLDSMITH, Nathaniel Oliver (1900), Genl. Mgr., Weir Frog Co., East Norwood, Cincinnati, and *for mail*, 2319 Monroe Ave., Norwood, O.
- GOODENOUGH, Walter (1912), Mgr. Keokuk Div., Stone & Webster Engrg. Corp., Keokuk, Ia.
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- GOODRICH, Robert R. (1903), Prof. Metallurgy, Univ. of Ariz., Tucson, Ariz.
- GOODWIN, Frank (1908), care of Thos. Cooke & Sons, Ludgate, Circus, London, England.
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- GORDON, Henry Decatur (1896), 80 White St., New York, N. Y., and 15a Evergreen Pl., East Orange, N. J.
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- GORDON, William (1912), Mgr. Steam, Elec. and Plumbing Depts., Thompson-Starrett Co., 660 First Ave., New York, and Richmond Hill Drive, Richmond Hill, L. I., N. Y.
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- GOWIE, William (1905), Plainfield, N. J.
- GRAF, Samuel Herman (Junior, 1912), Instr. in Mech. Engrg., Ore. Agri. College, Corvallis, Ore.
- GRAHAM, William Harvey (1911), Mech. Supt., N. S. Steel & Coal Co., Ltd., and Beech St., Sydney Mines, N. S., Canada.
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- GRAY, John Wilson (Junior, 1895), Supt. of Mchy., Newport News Shipbuilding & Dry Dock Co., and *for mail*, 124 28th St., Newport News, Va.
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- GRAY, William Emery (1907), Genl. Sales Mgr., The Enameled Pipe & Engrg. Co., Elyria, O.
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- HERR, Herbert T. (1907), V. P. and Genl. Mgr., The Westinghouse Mch. Co., East Pittsburgh, and 218 S. Dallas Ave., Pittsburgh, Pa.
- HERRESHOFF, J. B. Francis (1894), V. P., Nichols Copper Co., Cons. Engr., Genl. Chem. Co., 25 Broad St., and *for mail*, 620 West End Ave., New York, N. Y.
- HERRESHOFF, John B. (1884), Manager, 1893-1896; Pres. and Treas., Herreshoff Mfg. Co., Bristol, R. I.
- HERRICK, Carl Albert (1912), Cons. Engr., 3816 Thomas Ave., S., Minneapolis, Minn.
- HERRICK, Charles H. (1910), N. E. Rep. Gas Eng. Dept., National Meter Co., 159 Franklin St., Boston, and High St., Winchester, Mass.

- HERRICK, James A. (1880), Metallurgical Engr., Cons. and Contr. Engr. for Herrick Patented Gas Producers, Valves, Furnaces, etc., Suite 1303-1304, 90 West St., New York, N. Y., and 152 Roseville Ave., Newark, N. J.
- HERRIMAN, Victor D. (Junior, 1909), Engr., Internatl. Steam Pump Co., 115 Broadway, New York, and *for mail*, 169 Quincy St., Brooklyn, N. Y.,
- HERRON, James H. (1897; 1905), Cons. Metallurgical Engr., 2041 E. 3d St., Cleveland, and Fairmount Blvd., Shaker Hgts., Cleveland, O.
- HERSCHEL, Winslow Hobart (1910), Assoc. Prof. Mech. Engrg., Univ. of Me., Orono, Me.
- HERSCHMANN, Arthur J. (1900; 1905), Watchung, N. J.
- HERSEY, Mayo Dyer (Junior, 1912), Asst. Physicist, U. S. Bureau of Standards, Washington, D. C.
- HERSHEY, Martin E. (1889), 114 Liberty St., and 523 W. 143d St., New York, N. Y.
- HERTER, Emil (1894), Mech. Engr., Edison Crusher Co., Stewartsville, and *for mail*, 129 Park Ave., Orange, N. J.
- HESS, Henry (1906), Manager 1911-1914; 1510 W. Allegheny Ave., Philadelphia, Pa.
- HESS, Howard D. (1903), Prof. Mch. Design, Cornell Univ., and 7 South Ave., Ithaca, N. Y.
- HESS, Samuel P. (Junior, 1911), Motor Spring Dept., Detroit Steel Products Co., and *for mail*, 178 Peterboro St., Detroit, Mich.
- HEWITT, Wm. (1880), Manager, 1884-1887; Trenton Iron Co., and *for mail*, 471 Hamilton Ave., Trenton, N. J.
- HEWLETT, Edward M. (1897; 1900), Engr. of Switchboard Dept., Genl. Elec. Co., and Ballston Rd., R. D., Schenectady, N. Y.
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- HIBBARD, Thomas (1889), Treas. and Mech. Engr., Geo. Lawley & Sons Corp., Neponset, and *for mail*, 17 Nottingham St., Dorchester, Mass.
- HIDER, George Turner (Junior, 1911), Mech. Draftsman, Isthmian Canal Com., Cristobal, Canal Zone, Panama, C. A., and Greenville, Miss.
- HIGDON, John C. (Associate, 1901), Mech. Engr. and Atty-at-Law, Spec., Pat. and Trade Mark Causes, 605 Central Natl. Bank Bldg., and Buckingham Club, St. Louis, Mo.
- HIGGINS, Campbell Peck (1893), 127 E. 5th Ave., Roselle, N. J.
- HIGGINS, George F. (1886; 1906), Treas., Gem Mfg. Co., Chelsea, and *for mail*, 41 Mt. Vernon St., Melrose, Mass.

- HIGGINS, John W. (Junior, 1902), Pres. and Treas., Worcester Pressed Steel Co., North Ave., and *for mail*, 184 Highland St., Worcester, Mass.
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- HILDRETH, William Osgood (Junior, 1888), Engr., The Lamson Co., 161 Devonshire St., Boston, and *for mail*, 643 Westford St., Lowell, Mass.
- HILES, A. Lionel (1912), Ch. Engr. Hoisting and Min. Eng. Dept., Wash. Iron Wks., and *for mail*, 2101 31st Ave., S., Seattle, Wash.
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- HILL, Benjamin Wood (Junior, 1912), Hill Military Academy, Portland, Ore.
- HILL, Charles Hubbard (Associate, 1907), Designing Engr., Genl. Elec. Co., and *for mail*, 305 Lenox Rd., Schenectady, N. Y.
- HILL, Ebenezer (1892), Genl. Mgr., Norwalk Iron Wks. Co., South Norwalk, Conn.
- HILL, Ebenezer, Jr. (1900; 1907), Secy. and Supt., Norwalk Iron Wks. Co., South Norwalk, and *for mail*, 11 Elm St., Norwalk, Conn.
- HILL, Edgar Logan (Junior, 1908), Supt. Elec. Cable Wks., Am. Steel & Wire Co., P. O. Box 553, and 821 Pleasant St., Worcester, Mass.
- HILL, E. Rowland (1907), Cons. Engr., Gibbs & Hill, Pennsylvania Sta., New York, N. Y., and 76 Watson Ave., East Orange, N. J.
- HILL, Geo. (1892), Builder, 31 E. 27th St., New York, N. Y., and New Brunswick, N. J.
- HILL, Harold H. (Associate, 1904), Mech. Engr., Dist. Mgr., Erie City Iron Wks., 807 N. E. Bldg., and 11,317 Belleflower Rd., N. E., Cleveland; also Hilltop Farm, Wickliffe, Lake Co., O.
- HILL, John W. (1899), Sales Engr., Bantam Anti-Friction Co., Bantam, Conn.
- HILL, Nicholas Snowdon, Jr. (1912), Cons. Hyd. and Sanitary Engr., 100 William St., New York, N. Y., and 50 Glenwood Ave., East Orange, N. J.
- HILL, Reuben (1908), Factory Mgr., Detroit Lubricator Co., and Addison Apts., Detroit, Mich.
- HILL, Robert J. (Associate, 1904), 5027 Madison Ave., Chicago, Ill.
- HILL, Thomas (1900), Cons. Engr., 2102 Jersey St., and 2102 Lawndale, Quincy, Ill.
- HILL, Walter L. (Associate, 1902), Hill-Ray Engrg. Co., 110 State St., Boston, and Arlington, Mass.
- HILL, William (1883; 1889), Pres., The Collins Co., Collinsville, Conn.

- HILLER, Joseph Lilburne (Associate, 1907), Ch. Engr., Pa. Crusher Co., Stephen Girard Bldg., Philadelphia, Pa.
- HILLER, N. H. (1902), Pres., Carbondale Mch. Co., and 68 Laurel St., Carbondale, Pa.
- HILLMAN, Cecil Robert (1899), Loco. Supt., Sao Paulo Ry. Co., and Largo dos Guayanazes, No. 4, Sao Paulo, Brazil, S. A.
- HILLMANN, Gustav (1883), Life Member; Naval Arch., 470 Greene Ave., Brooklyn, N. Y.
- HILLYER, George, Jr. (1898; Associate, 1904), Cons. Engr., 568 W. Peachtree St., Atlanta, Ga.
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- HINCHMAN, Theodore H., Jr. (1895; 1905), Cons. Engr., 708 Washington Arcade, and 223 Seminole Ave., Detroit, Mich.
- HIND, R. Renton (Junior, 1912), Ch. Engr., Ewa Plantation Co., Ewa, Oahu, H. T.
- HINDE, Louis Joseph (1912), Secy., The Toledo Mch. & Tool Co., and *for mail*, 2047 Glenwood Ave., Toledo, O.
- HINRICHS, Frederic William, Jr. (1911), Asst. Prof. Applied Mechanics, Univ. of Rochester, and 216 Oxford St., Rochester, N. Y.
- HINTZE, Thomas F. (Junior, 1912), Engr's. Asst. Constr. Dept., Consolidated Gas Co., foot of W. 42d St. Wks., New York, and 5 25th St., Elmhurst, L. I., N. Y.
- HIRSCHLAND, Dr. Franz Herbert (Junior, 1906), Genl. Mgr., Goldschmidt Detinning Co., 60 Wall St., and 155 Riverside Drive, New York, N. Y.
- HIRSHFELD, Clarence Floyd (Junior, 1905), Prof. Power Engrg., Sibley College, Cornell Univ., and *for mail*, 206 Quarry St., Ithaca, N. Y.
- HIRSHHEIMER, Harry Julius (1892; Associate, 1904), V. P., La Crosse Plow Co., and *for mail*, 131 S. 15th St., La Crosse, Wis.
- HIRT, Louis Joseph (1894), V. P., Pearson Engrg. Corp., 115 Broadway, New York, and *for mail*, Van Cortland Terrace, Yonkers, N. Y.
- HITCHCOCK, Embury A. (1898), Prof. Exper. Engrg., Ohio State Univ., and 380 W. 8th Ave., Columbus, O.
- HITCHCOCK, Fred'k Matthew (1899; 1907), Mgr., Dexter Folder Co., Pearl River, N. Y.
- HOAGLAND, Frank Oscar (1912), Wks. Mgr., Union Metallic Cartridge Co., and *for mail*, 939 Barnum Ave., Bridgeport, Conn.
- HOBART, Frank G. (1890), Ch. Engr., Fairbanks-Morse Mfg. Co., and *for mail*, 1259 Chapin St., Beloit, Wis.
- HOBART, James C. (1888; 1893), Secy. and Mgr., Triumph Elec. & Ice Mch. Cos., and 2820 Winslow Ave., Cincinnati, O.
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- HOBBS, James Clarence (Junior, 1912), Steam Engr., The Allegheny Co. Light Co., and *for mail*, 5137 Woodlawn Ave., Pittsburgh, Pa.
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- HODGINS, George S. (1908), Asst. Engr., Natl. Transcontinental Ry., and 300 Cooper St., Ottawa, Ont., Canada.
- HODGKINSON, Francis (1902), Mech. Engr., Westinghouse Mch. Co., East Pittsburgh, and *for mail*, 127 Linden St., Edgewood Park, Pa.
- HODGSON, Alec Wilberforce (1910), M. M., Astoria Light, Heat & Power Co., Astoria, L. I., N. Y., and *for mail*, 190 Belmont Ave., Jersey City, N. J.
- HOEFER, Elmer Geo. (Associate, 1909), Prof. Mech. Engrg., Univ. of Wyoming, and 415 Eleventh St., Laramie, Wyo.
- HOERR, Alexander L. (1907), Steam and Hyd. Engr., Natl. Tube Co., Natl. Wks., and *for mail*, 1011 McCleary St., McKeesport, Pa.
- HOFFMAN, James David (1894; 1903), Prof. Mech. Engrg. and Practical Mechanics, Univ. of Neb., Sta. A, and 1746 Washington St., Lincoln, Neb.
- HOFFMANN, Simon (1911), First V. P., Loco. Superheater Co., 30 Church St., New York, N. Y.
- HOFMEYER, Geo. A. (Associate, 1905), Inventor and Mfr., Ridgewood, and *for mail*, Hohokus, N. J.
- HOGAN, Patrick Henry (Associate, 1904), N. E. Mgr., Dearborn Chem. Co., John Hancock Bldg., and Roslindale, Boston, Mass.
- HOGLE, Milton W. (1901; 1906; 1911), Hopeman Bros. Lumber & Mfg. Co., 569 Lyell Ave., Rochester, N. Y.
- HOGUE, Oliver D. (1909), Treas., Goulds Mfg. Co. of Ill., and The Pattington, 660 Graceland Ave., Chicago, Ill.
- HOLBROOK, Dio Lewis (1899), Engr., Otis Elev. Co., Otis Elev. Bldg., 11th Ave. and 26th St., and *for mail*, 46 E. 21st St., New York, N. Y.
- HOLBROOK, Percy (1900), V. P., Rail Joint Co., 185 Madison Ave., New York, N. Y.
- HOLDSWORTH, Fred Dean (1904), Mech. Engr., Sullivan Mchy. Co., Claremont, N. H.
- HOLL, Chas. L. (Junior, 1908), Jos. Schlitz Brewing Co., Milwaukee, Wis., and *for mail*, 302 S. Monroe St., Streator, Ill.
- HOLLANDER, Emanuel (1901; 1906), Ch. of Estimating Staff, Engrg. Dept., Otis Elev. Co., Otis Elev. Bldg., 11th Ave. and 26th St., and 143 W. 111th St., New York, N. Y.

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- HOLLINGSWORTH, Samuel (1899; 1907), Mech. Engr., 171 E. Front St., Plainfield, and Stout Ave., Scotch Plains, N. J.
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- HOLLMANN, Frederick W. (Junior, 1907), Wks. Engr., The Carborundum Co., and *for mail*, 3 C St., Niagara Falls, N. Y.
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- HOLLOWAY, Thurman Welford (Junior, 1906), Asst. Prin., Sch. Mech. Engrg., Internatl. Corr. Schools, and *for mail*, 1659 Madison Ave., Scranton, Pa.
- HOLMAN, M. L. (1890), Vice-President, 1894-1896, 1903-1905; President, 1908; Cons. Engr., Holman & Laird, Chemical Bldg., and *for mail*, 3744 Finney Ave., St. Louis, Mo.
- HOLMAN, R. Claude (1907), Genl. Supt., The Hooven-Owens-Rentschler Co., P. O. Box 385, Hamilton, O.
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- HOLMES, Andrew A. (Junior, 1904), Pres. and Treas., Hancock, Holmes Fdy. Mch. Wks., P. O. Box 461, and 31 Porter Pl., Atlanta, Ga.
- HOLMES, Arthur (Junior, 1904), Engr., H. H. Franklin Mfg. Co., and *for mail*, 726 Euclid Ave., Syracuse, N. Y.
- HOLMES, Harold W. (Junior, 1912), Genl. Mgr., The Puritan Brick Co., V. P., The Detroit Tool Co., 1325 Penobscot Bldg., Detroit, Mich.
- HOLMES, Joseph Austin (1908), Dir., Bureau of Mines, and 2717 Quarry Rd., Washington, D. C.
- HOLMES, Urban Tigner (1910), Commander, U. S. N., Bureau of Steam Engrg., Navy Dept., Washington, D. C.
- HOLMES, Walter G. (1897; 1907), Mech. Engr., Willmot Castle Co., and 106 Northview Terrace, Rochester, N. Y.
- HOLT, Charles Parker (Associate, 1906), V. P., The Holt Mfg. Co., and V. P., Holt Bros. Co., 304 Balboa Bldg., and 2600 Vallejo St., San Francisco, Cal.
- HOLT, Frank Eugene (1900), Ch. Engr., Singer Mfg. Co., Elizabeth, and *for mail*, 93 W. 34th St., Bayonne, N. J.
- HONISS, William Henry (1899), Mech. Engr. and Solicitor of Patents, 60 Prospect St., and 102 Huntington St., Hartford, Conn.
- HONSBURG, August A. (1901), Mech. Engr., Ret., Sta. B, Box 54 and 5 Euclid Windsor Pl., Cleveland, O.
- HONYWILL, Albert William, Jr. (Junior, 1911), 522 Holmes St., Wilkesburg, Pa.

- HOOD, Ozni Porter (1904), Ch. Mech. Engr., U. S. Bureau of Mines, 40th and Butler Sts., and *for mail*, Old Heidelberg Cottage No. 4, Braddock Ave. and Waverly St., Pittsburgh, Pa.
- HOOD, Warren Blake (Junior, 1910), Genl. Shop Insp., Canadian Pacific Ry. Co., and *for mail*, 725 Dorchester St., W., Montreal, P. Q., Canada.
- HOOK, James William (Junior, 1912), Sales Mgr., C. A. Dunham Co., and *for mail*, 502 N. 5th St., Marshalltown, Ia.
- HOOPES, Maurice (1901), Pres., Finch, Pruyn & Co., Glens Falls, N. Y.
- HOPKINS, Arthur T. (1912), Factory Mgr., Mech. Rubber Co., Cleveland, O.
- HOPKINS, George F. (1912), Genl. Supt., Frost Gear & Mch. Co., and *for mail*, 105 First St., Jackson, Mich.
- HOPKINSON, Allen Haigh (1911), Gov. Dir., J. Hopkinson & Co., Ltd., Britannia Wks., and The Dene. Kirkheaton, Huddersfield, England.
- HOPPES, John J. (1890), Pres., Hoppes Mfg. Co., and Trump Mfg. Co., and *for mail*, 1330 E. High St., Springfield, O.
- HOPPIN, Charles Albert (1911), Genl. Supt. Elec. and Heating Depts., Peoria Gas & Elec. Co., and *for mail*, 316 S. Jefferson Ave., Peoria, Ill.
- HOPPS, John Herbert (1905), Cons. Engr., 503 Market St., San Francisco, and Ross, Marin Co., Cal.
- HOPTON, W. E. (1891; 1896), Purchasing Dept., Solvay Process Co., and *for mail*, 311 Summit Ave., Syracuse, N. Y.
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- HORNE, H. Field (Junior, 1909), Member of Firm, R. W. Horne & Son, Garage, Mohegan, N. Y.
- HORNUNG, Geo. (1886), Cons. Engr., Johnston Bldg., Cincinnati, O., and 512 Fairfield Ave., Bellevue, Ky.
- HORSTMANN, Henry J. (1894), Mech. Engr., The F. W. Horstmann Co., 408-410 John St., East Newark, and 240 Ridge St., Newark, N. J.
- HORTON, Charles M. (Junior, 1909), Averill Park, N. Y.
- HORTON, John T. (1895), Specialist in Equip. for Hoisting and Handling Material, 90 West St., New York, and 276 Rugby Rd., Brooklyn, N. Y.
- HORTON, S. Ellsworth (1905), Pres. and Genl. Mgr., E. Horton & Son Co., Windsor Locks, Conn.
- HORTON, William Miller, Jr. (Junior, 1911), Asst. Supt., The Kirk Latty Mfg. Co., and *for mail*, 1360 W. 111th St., Cleveland, O.; also, Clarke St., Port Chester, N. Y.
- HOSMER, Amos G. (1902), Mech. Supt., Lancaster Mills, 1 Green St., and *for mail*, 40 Chestnut St., Clinton, Mass.

- HOSMER, Sidney (1902), Elec. Engr., Edison Elec. Ill. Co., 39 Boylston St., and 74 Bay State Rd., Boston, Mass.
- HOUCHIN, Ernest A. (1911), Pres., Houchin-Aiken Co., 35-45 53d St., Brooklyn, N. Y.
- HOUGH, David Leavitt (1891; 1892), Pres., United Engrg. & Contr. Co., Pres., Cuban Engrg. & Contr. Co., and *for mail* 17 W. 42d St., New York, N. Y.
- HOUGHTON, Charles E. (1899), Assoc. Prof. Mech. Engrg., N. Y. Univ., and *for mail*, Univ. Hgts., New York, N. Y.
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- HOUSUM, Chenoweth (Associate, 1908), Allis-Chalmers Co., and *for mail*, 261 25th St., Milwaukee, Wis.
- HOWARD, Chas. Alton (Junior, 1907), West. Mgr., Gunn, Richards & Co., First Natl. Bank Bldg., Chicago, Ill.
- HOWARD, Charles P. (1880), Pres., James L. Howard & Co., and 116 Farmington Ave., Hartford, Conn.
- HOWARD, Henry Sherwin (Junior, 1911), Engr., Alaska Commercial Bldg., San Francisco, and 2065 Oakland Ave., Piedmont, Cal.
- HOWARD, O. Zell (1908), The Griscom Spencer Co., 90 West St., and *for mail*, 356 W. 145th St., New York, N. Y.
- HOWARTH, H. A. Stevens (1908), Asst. Prof. Mch. Design, Carnegie Inst. of Tech., and *for mail*, 3732 Dawson St., Pittsburgh, Pa.
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- HOWELL, Sylvester S. (1911), Cons. Engr., Chamberlain & Howell, Engrs., 1522 Marquette Bldg., and 6615 Woodlawn Ave., Chicago, Ill.
- HOWELLS, Charles (1904), Box 164, Washingtonville, N. Y.
- HOWLAND, Lewis Abner (1910), Genl. Supt., Queens Borough Gas & Elec. Co., Far Rockaway, N. Y.

- HOWLETT, Lewis G. (Junior, 1903), Supt., Industrial Wks., and *for mail*, 415 N. Lincoln St., Bay City, Mich.
- HOXIE, Frederick J. (1907), Phenix, R. I.
- HOXIE, George L. (1893; 1904), Hoxie & Goodloe, 50 E. 41st St., New York, N. Y., and 99 Clarewill Ave., Upper Montclair, N. J.
- HOXIE, Wm. D. (1899), V. P., The Babcock & Wilcox Co., 85 Liberty St., New York, and 298 Washington Ave., Brooklyn, N. Y.
- HUBBARD, Allen (1910), Cons. Engr., 88 Pearl St., Boston, Mass.
- HUBBARD, Carleton Waterbury (Junior, 1911), Constr. Engr., Sayles Bleacheries, and *for mail*, 218 Walker St., Saylesville, R. I.
- HUBERT, Herman (1905), Genl. Inspr. of Mines, Prof. Applied Mechanics and Industrial Physics, Univ. of Liege, and Rue Fabry 68, Liege, Belgium.
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- HUGHES, Robert G. (1908), Secy. and Mech. Engr., John W. Ferguson Co., and *for mail*, 152 Market St., Paterson, N. J.
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- HUNT, Charles B. (1902), Supt. Constr., Buckeye Eng. Co., and 636 McKinley Ave., Salem, O.
- HUNT, Eugene Alexander (Junior, 1910), Treas. and Genl. Mgr., The Gilbert Hunt Co., Walla Walla, Wash.
- HUNT, Leigh A. (1906), Pres., Hunt Engrg. Co., 1104 Commerce Bldg., Kansas City, Mo.
- HUNT, Robert W. (1880), President, 1891; Manager, 1882-1885; Robert W. Hunt & Co., 2200 Insurance Exch. Bldg., and 77 E. Division St., Chicago, Ill.
- HUNT, Wm. Floyd (1894; Associate, 1903), Life Associate; 45 Broadway, New York, N. Y.
- HUNTER, Charles Welsh (1911; 1912), Gas. Engr., Stone & Webster Engrg. Corp., 147 Milk St., Boston, Mass.
- HUNTER, Geo. E. (1890), Genl. Supt., Elgin Natl. Watch Co., and *for mail*, 325 Watch St., Elgin, Ill.
- HUNTER, J. S. (1889), 15 Washington St., Hartford, Conn.
- HUNTER, James D. (1894), V. P., Hunter Mch. Co., 48 Wall St., North Adams, Mass.
- HUNTER, James Francis (1899; 1909), Asst. Engr. of Constr., Consld. Gas Co., 4 Irving Pl., New York, and 1323 Dorchester Rd., Brooklyn, N. Y.
- HUNTER, John (1909), Ch. Engr., Union Elec. Light & Power Co., and 3103 Shenandoah Ave., St. Louis, Mo.
- HUNTER, John A. (1909), Steam Engr., Am. Sheet & Tin Plate Co., Frick Bldg., Pittsburgh, and 151 Dickson Ave., Ben Avon, Pa.
- HURD, Charles Henry (1902), Cons. Hyd. and Sanitary Engr., 113 Monument Pl., and 3137 N. New Jersey St., Indianapolis, Ind.
- HURD, Hobert J. (1894; 1897), 908 W. 3d St., Plainfield, N. J.
- HURDELL, Victor Hollister (Junior, 1912), Salesman, Internatl. Steam Pump Co., 465 John Hancock Bldg., Boston, Mass., and Narragansett Hotel, Providence, R. I.

- HURLBURT, Alfred (Associate, 1902), Engr., Kansas City Gas Co., 910 Grand Ave., and 716 Gleed Terrace, Kansas City, Mo.
- HURLEY, Daniel (Junior, 1904), Technology Chambers, Boston, Mass., and 42 E. Manning St., Providence, R. I.
- HUSON, Winfield Scott (1887; 1891), Genl. Supt., Whitlock Ptg. Press Mfg. Co., and 12 Cottage St., Derby, Conn.
- HUSSEY, Charles Ward (Junior, 1908), 33 St. Andrews Pl., Yonkers, N. Y.
- HUSSEY, Oren S. (1897), Treas., Frank Ridlon Co., 253 A St., Boston, and Brookline, Mass.
- HUSSEY, Wm. Edgerly (1904), Mgr. N. Y. Office, Providence Engrg. Wks., 50 Church St., New York, and 194 Bainbridge St., Brooklyn, N. Y.
- HUSTED, Clifford Mackay (Junior, 1910), Mgr., Husted Milling Co., and *for mail*, 151 Park St., Buffalo, N. Y.
- HUSTON, Charles L. (Associate, 1887), V. P. and Wks. Mgr., Lukens Iron & Steel Co., and V. P. and Wks. Mgr., Jacobs-Shupert U. S. Fire Box Co., and 64 S. 1st Ave., Coatsville, Pa.
- HUTCHINGS, Clifford F. (Junior, 1907), Sales Engr. Hoist Dept., Sprague Elec. Wks., 527 W. 34th St., and *for mail*, 2441 Seventh Ave., New York, N. Y.
- HUTCHINS, George Francis (1910), Genl. Supt., Crompton & Knowles Loom Wks., and *for mail*, 20 Ripley St., Worcester, Mass.
- HUTCHINSON, Arthur H. (1899), Sales Engr., Frick Co., 406-407 Atlanta Natl. Bank Bldg., and *for mail*, 58 Ponce de Leon Pl., Atlanta, Ga.
- HUTCHINSON, Cary T. (1894), Cons. Engr., 60 Wall St., New York, N. Y.
- HUTCHINSON, Charles Tripler (1910), Managing Editor, Western Engineering, 420 Market St., San Francisco, Cal.
- HUTCHINSON, Ely Champion (1912), Commer. Engr., The Pelton Water Wheel Co., 19th and Harrison Sts., San Francisco, Cal.
- HUTCHISON, Miller Reese (1912), Ch. Engr., Edison Lab., Thos A. Edison, Inc., Orange, N. J.
- HUTCHISON, Richard (1900; 1904), Dist. Sales Mgr., Babcock & Wilcox Co., 35 Federal St., Boston, Mass.
- HUTSON, Henry L. (1906; 1908), Ch. Engr. and Sales Mgr., A. M. Lockett & Co., Ltd., 533 Baronne St., and 721 Lowerline St., New Orleans, La.
- HÜTTINGER, Wm. R. (Junior, 1906), Asst. Engr., Bessemer Gas Eng. Co., and *for mail*, 332 Lincoln Ave., Grove City, Pa.
- HUTTON, Frederick R. (1880), Secretary, 1883-1906; President, 1907; Honorary Secretary of the Society, 29 W. 39th St.; Life Member; Emeritus Prof. Mech. Engrg., Columbia Univ.; Cons. Engr., Automobile Club of Am., and *for mail*, 257 W. 86th St., New York, N. Y.
- HUTTON, Manclus S. (Junior, 1908), 257 W. 86th St., New York, N. Y.

- HUTTON, Sol Elwood (1912), Wks. Mgr. and Ch. Engr., Idaho-Natl. Harvester Co., and *for mail*, 115 Van Buren St., Moscow, Idaho.
- HVID, Marinus (Junior, 1911), Ch. Draftsman, Inland Steel Co., Indiana Harbor, Ind.
- HVID, Rasmus M. (1907; Associate, 1909), V. P., R. M. Hvid Co., Old Natl. Bank Bldg., and *for mail*, 52 Frelinghuysen Ave., Battle Creek, Mich.
- HYATT, Herbert Richardson (1912), Mech. Engr. Sales Dept., Custodis Chimney Constr. Co., 95 Nassau St., New York, N. Y.
- HYDE, Charles E. (1885), Marine Engr. and Naval Arch., 424 W. 20th St., New York, N. Y.
- HYDE, John Sedgwick (Associate, 1892), Pres. and Genl. Mgr., Bath Iron Wks., Bath, Me.
- HYMAN, D. (1892), V. P., Empire Limestone Co., Hudson and 4th Sts., and 410 Porter Ave., Buffalo, N. Y.
- HYMANS, Frederick (1912), Engr., Otis Elev. Co., New York, N. Y., and *for mail*, 179 Thomas St., Bloomfield, N. J.
- IDELL, Frank E. (1889), Life Member; Mech. Engr., 50 Church St., New York, N. Y.
- IDELL, Percy C. (1901; 1909), Mech. Engr. Sales Dept., The Babcock & Wilcox Co., 85 Liberty St., New York, and *for mail*, 157 83d St., Brooklyn, N. Y.
- ILSLEY, John Parker (1903; 1907), Niles-Bement-Pond Co., 111 Broadway, New York, and *for mail*, Fourth St., New Brighton, S. I., N. Y.
- INGALLS, Frederick D. B. (1909), Engr., C. A. Dunham Co., and *for mail*, 309 N. 1st St., Marshalltown, Ia.
- INGERSOLL, Geo. T. (1903), Mech. Engr., Worcester, Otsego Co., N. Y.
- INGERSOLL, Winthrop (Associate, 1893), Pres., Ingersoll Milling Meh. Co., 911 N. Church St., Rockford, Ill.
- INGHAM, Howard M. (1907), Efficiency Engr., Mohawk Bldg., 160 Fifth Ave., New York, N. Y., and 76 Dwight Pl., Englewood, N. J.
- INSLEE, Heber Clyde (1907), Engr. on Plant Work, Babcock & Wilcox Co., Bayonne, N. J.
- IRELAND, Mark L. (Junior, 1902), Capt. Coast Artillery Corps, U. S. A., Fort Terry, N. Y.
- ISELL, Howard L. (Junior, 1891), Asst. Ch. Engr., Am. Brass Co., Waterbury, and *for mail*, 706 High St., Union City, Conn.
- ISHAM, Henry S. (1902; 1907), Mech. Draftsman, Interborough Rapid Transit Co., 165 Broadway, and *for mail*, 951 Park Ave., New York, N. Y.
- ISHERWOOD, Benjamin Franklin (Honorary, 1894), Ret. Ch. Engr., Rank of Rear Admiral, U. S. N., 111 E. 36th St., New York, N. Y.
- IVENS, Edmund M. (Junior, 1908), Asst. Mgr. Skinner Eng. Co., 1018 Hibernia Bank Bldg., and *for mail*, 1527 Valmont St., New Orleans, La.

- IVES, Frederick Walter (Junior, 1910), Instr. Engrg. Drawing, Ohio State Univ., and 1495 Pennsylvania Ave., Columbus, O.
- JACKSON, Arthur C. (1903; 1910), Genl. Supt., Secy. and Treas., Miller Lock Co., 4533 Tacony St., Frankford, and *for mail*, 6445 Greene St., Germantown, Philadelphia, Pa.
- JACKSON, Charles Arthur (1911), Mech. and Hyd. Engr., The Pelton Water Wheel Co., 90 West St., New York, N. Y.
- JACKSON, Charles J. (1905), Secy. and Genl. Mgr., Easton Tool & Mch. Co., 39-41 N. Sitgreaves St., and 30 S. 5th St., Easton, Pa.
- JACKSON, Dugald C. (1890), 84 State St., and Mass. Inst. of Tech., Boston, Mass.; also D. C. & Wm. B. Jackson, 111 W. Monroe St., Chicago, Ill.
- JACKSON, F. W. (1909), Dist. Mgr., Harrisburg Fdy. & Mch. Wks., 424 N. Y. Life Bldg., Chicago, Ill.
- JACKSON, Henry Docker (1912), Cons. Engr., 88 Broad St., Boston, and 39 Albin St., Medford, Mass.
- JACKSON, John Price (1903), Dean Sch. of Engrg., Pa. State College, and Cons. Engr., State College, Center Co., Pa.
- JACKSON, Lucian C. (1901), Cons. Gas Eng. Expt., 905 D. S. Morgan Bldg., and *for mail*, 351 Hoyt St., Buffalo, N. Y.
- JACKSON, Percy (Junior, 1904), Ch. Engr., J. S. Schofield's Sons Co., P. O. Box 93, and 826 Orange St., Macon, Ga.
- JACKSON, Roscoe B. (Junior, 1904), Treas. and Genl. Mgr., Hudson Motor Car Co., Detroit, Mich.
- JACKSON, Walter W. (1902), Ch. Draftsman, The Regina Co., Rahway, and Sewaren, N. J.
- JACKSON, Wm. B. (1901), Manager, 1912-1915; Life Member; D. C. & Wm. B. Jackson, Engrs., Harris Trust Bldg., 111 W. Monroe St., and 5450 East View Park, Chicago, Ill.
- JACOBS, Henry William (1905), Pres., Orweld R. R. Service Co., 339 Ry. Exch., Chicago, Ill., and 117 Greenwood Ave., Topeka, Kan.
- JACOBS, Ward S. (1897; 1904), Treas., The Walton Co., and *for mail*, 530 Farmington Ave., Hartford, Conn.
- JACOBUS, D. S. (1889), Manager, 1900-1903; Vice-President, 1903-1905; Advisory Engr., Babcock & Wilcox Co., 85 Liberty St., New York, N. Y., and Spec. Lecturer in Exper. Engrg., Stevens Inst. of Tech., Hoboken, and 70 Summit Ave., Jersey City, N. J.
- JACOBUS, Robert F. (1907; 1912), Francisco & Jacobus, 200 Fifth Ave., New York, N. Y., and *for mail*, Ridgefield, N. J.
- JAHNCKE, Ernest Lee (Associate, 1904), Pres., The Jahncke Navigation Co., 814 Howard Ave., and 3923 Carondelet St., New Orleans, La.
- JAKOBSSON, Herman (1907), Cons. Engr., Victor Bldg., 724 Ninth St., N. W., Washington, and Takoma Park, D. C.
- JALONICK, Hartwell (Junior, 1909), Tex. Power & Light Co., 1320 Commerce St., Dallas, Tex.
- JAMIESON, Major Charles Clark (1911), Genl. Supt., Walter A. Wood Mowing & Reaping Mch. Co., 1 Mechanic St., and 31 High St., Hoosick Falls, N. Y.

- JAMISON, Alpha Pierce (Junior, 1900), Prof. Mech. Drawing, Purdue Univ., and *for mail*, 111 State St., W. S., Lafayette, Ind.
- JANVIER, Henry Archer (1912), Asst. Mech. Engr., Ferracute Mch. Co., and *for mail*, 219 E. Commerce St., Bridgeton, N. J.
- JAPPE, Kurt Wade (Junior, 1912), with Harrison Williams, 60 Broadway, New York, N. Y., and *for mail*, 1210 Bloomfield St., Hoboken, N. J.
- JAQUAYS, Homer Morton (1899; 1903), Ch. Engr. Montreal Branch, The Steel Co. of Canada, Ltd., 1272 Notre Dame St., Montreal, and *for mail*, 645 Grosvenor Ave., Westmount, P. Q., Canada.
- JAQUES, Wm. H. (1893), Capt. and Pres., Hampton Water Wks. Co., Progress Mfg. Co., Hotel Puritan, Commonwealth Ave., Boston, Mass.; also, Little Boar's Head, N. H.
- JARECKI, Alexander (1889; 1905), Secy., Jarecki Mfg. Co., and *for mail*, 305 W. 6th St., Erie, Pa.
- JARVIS, Chas. M. (1890), Vice-President, 1897-1899; Pres., Am. Hardware Corp., New Britain, and Berlin, Conn.
- JEALOUS, Arthur R. (Junior, 1908), Genl. Elec. Co., 84 State St., Boston, Mass.
- JEFFERIES, E. A. W. (1892), Mech. Engr., Morgan Constr. Co., and 656 Main St., Worcester, Mass.
- JEFFERIES, Frederick Lester (1900; 1905), Supt., Corn Products Refining Co., Argo, Cook Co., Ill.
- JENCKES, Lawrence Bates (1912), Engr., Crompton & Knowles Loom Wks., and *for mail*, 46 Fruit St., Worcester, Mass.
- JENKINS, Alexander Lewis (Junior, 1907), Assoc. Prof. Mech. Engrg., Univ. of Cincinnati, and 369 Terrace Ave., Cincinnati, O.
- JENKINS, M. L. (1899), Genl. Supt., Buda Co., and *for mail*, 101 155th St., Harvey, Ill.
- JENKS, Glen F. (Junior, 1909), Fort Monroe, Va.
- JENKS, Llywellyn Howard (1891), Mgr. N. Y. Office, Frick Co., 39 Cortlandt St., New York, N. Y., and Rutherford, N. J.
- JENKS, Richard*P. (1902), Mech. Engr., 735 Banigan Bldg., and 52 Princeton Ave., Providence, R. I.
- JENKS, William H. (1889), Brookville, Pa.
- JENNENS, Arthur E. (Junior, 1912), Box 1362, Salt Lake City, Utah.
- JENNESS, Chas. Harvey (1904), Instr. Mech. Drawing, Manual Training Dept., Chicopee H. S., and *for mail*, 106 Grape St., Chicopee, Mass.
- JENNINGS, Edward M. (Junior, 1901), Jarvis Engrg. Co., and Sales Agt., Parson Mfg. Co., 63 Oliver St., Boston, and 64 Orlando Ave., Winthrop, Mass.
- JENNINGS, Irving Callender (Junior, 1908), Nash Engrg. Co., 40 Water St., and *for mail*, 50 West St., South Norwalk, Conn.
- JESSEN, N. Baashuus (1912), Hyd. Engr., J. G. White & Co., Ltd., London, and *for mail*, 9 Cloak Lane, Cannon St., London, E. C., England.

- JETER, Sherwood F. (1909), Supv. Inspr., The Hartford Steam Boiler Inspec. & Ins. Co., and *for mail*, 7 Oakland Terrace, Hartford, Conn.
- JETT, Carter C. (Junior, 1902), Ch. Draftsman, Pittsburgh Crucible Steel Co., West Austintown, O.
- JEWELL, Chas. W. (1893), Engr., Dept. Water Supply, Gas and Elec., Brooklyn, and *for mail*, Woodhaven, N. Y.
- JEWETT, Arthur C. (1909), Prof. Mech. Engrg., Univ. of Me., Orono, Me.
- JEWETT, Frank N. (1908), Sales Mgr., Wagner Elec. Mfg. Co., 6400 Plymouth Ave., and *for mail*, 6 Parkland Pl., St. Louis, Mo.
- JOHN, Griffith (1899), Cons. Engr., Otis Elev. Co., Otis Elev. Bldg., 11th Ave. and 26th St., New York, and *for mail*, 11 Delavan Terrace, Yonkers, N. Y.
- JOHNSON, Abbott Livingstone (1910), Pres., Warner Gear Co., and *for mail*, 330 Washington St., Muncie, Ind.
- JOHNSON, Arthur E. (1890; 1892), Life Member; Designer, Ordnance Office, War Dept., Washington, D. C.
- JOHNSON, Bradley S. (Associate, 1909), Rep., The T. H. Symington Co., 623 Peoples Gas Bldg., Chicago, Ill.
- JOHNSON, Carl Albert (1901), Pres., Gisholt Mch. Co., Madison, Wis.
- JOHNSON, Charles W. (1908), Genl. Supt., Westinghouse Elec. & Mfg. Co., East Pittsburgh, and *for mail*, 5890 Hobart St., Pittsburgh, Pa.
- JOHNSON, David Clayton (Junior, 1907), Asst. Engr., H. deB. Parsons, 22 William St., New York, and *for mail*, 245 Hewes St., Brooklyn, N. Y.
- JOHNSON, Edward E. (1891), Mfr., Well Screens, 2304 Long Ave., and *for mail*, 21 Langford Park Pl., St. Paul, Minn.
- JOHNSON, Edward Willis (1892), 70 Chestnut Ave., Waterbury, Conn.
- JOHNSON, F. Amos (1907), Cons. Mech. Engr. and Pat. Atty., 22 Morris St., Jersey City, and Dunellen, N. J.
- JOHNSON, Frank (1911), Designer, Cadillac Motor Car Co., and *for mail*, 152 Calvert Ave., Detroit, Mich.
- JOHNSON, Harry Dibrow, Jr. (Junior, 1912), Ch. Engr., Studebaker Corp., South Bend, Ind.
- JOHNSON, Hobart Stanley (1906), V. P. and Genl. Supt., Gisholt Mch. Co., Madison, Wis.
- JOHNSON, J. E., Jr. (1896; 1901), Mgr., Lake Superior Iron & Chem. Co., Ashland, Wis.
- JOHNSON, James F. (Junior, 1912), Dir. Drafting Dept. and Engrg. Extension Wk., State Trade Sch., Bridgeport, Conn.
- JOHNSON, John S. A. (1911), Prof. Exper. Engrg., Va. Poly. Inst., Blacksburg, Va.
- JOHNSON, Louis L. (1908), Cons. Engr., 428 Law Bldg., Indianapolis, and Attica, Ind.
- JOHNSON, Paul F. (1905), Secy. and Treas., Johnson Service Co., and 628 Shepard Ave., Milwaukee, Wis.

- JOHNSON, Raymond D. (1911), Hyd. Engr., Ontario Power Co., Drawer 496, Niagara Falls, N. Y., and 32 John St., Niagara Falls, Ont., Canada.
- JOHNSON, Theodore Woolsey (Associate, 1900), Life Associate; Prof. Mech. Drawing, U. S. Naval Acad., and *for mail*, 55 Franklin St., Annapolis, Md.
- JOHNSON, Warren (Associate, 1904), Cons. Engr., 122 Carondelet St., and 9 La Salle Pl., New Orleans, La.
- JOHNSON, Werner (1903), Asst. Engr. Turbine Dept., Genl. Elec. Co., Lynn, and *for mail*, 7 Danforth Ave., Cliftondale, Mass.
- JOHNSON, William M. (Junior, 1902), Panama-Pacific Internatl. Exposition Co., 618 Exposition Bldg., and 1145 Pine St., San Francisco, Cal.
- JOHNSTON, Archibald (1901), V. P., Bethlehem Steel Co., South Bethlehem, and 120 Church St., Bethlehem, Pa.
- JOHNSTON, James Ambler (Junior, 1907), Cons. Engr., Natl. Bank of Va. Bldg., and 315 S. 3d St., Richmond, Va.
- JOHNSTON, John Parry (1907), Genl. Mgr., N. Y. Eng. Co., 165 Broadway, New York, and Stony Brook, Suffolk Co., N. Y.
- JOHNSTON, William Atkinson (1911), Prof. of Theoretical and Applied Mechanics, Mass. Inst. of Tech., Boston, and Belmont, Mass.
- JOHNSTONE, Francis W. (1909), Natl. Iron & Steel Wks., S. A. Calzada de los Gallos, and Apartado 1031, Mexico City, Mexico, D. F.
- JONAS, Milton Rudolph (Junior, 1912), Steam Expt., Ill. Steel Co., and *for mail*, 1109 E. Cass St., Joliet, Ill.
- JONES, Albert I. (1892), Supt., The Pfaudler Co., 217 Cutler Bldg., and *for mail*, 107 Chili Ave., Rochester, N. Y.
- JONES, Benjamin N. (1904), Mgr. of Mfg., Otis Elevator Co., New York, N. Y., and *for mail*, 296 Essex Ave., Orange, N. J.
- JONES, Clement R. (1898; 1901), Dean, College of Engrg., W. Va. Univ., and 262 McLane Ave., Morgantown, W. Va.
- JONES, Daniel Lanning (Junior, 1905), Buyer and Asst. Factory Mgr., Chas. R. De Bevoise Co., Plane and Academy St., Newark, and *for mail*, 463 N. Grove St., East Orange, N. J.
- JONES, David Todd (1898; 1904), Genl. Mgr. and Treas., Wilbraham Green Blower Co., and *for mail*, 818 High St., Pottstown, Pa.
- JONES, Edward C. (1901), Ch. Engr. Gas Dept., Pacific Gas & Elec. Co., 445 Sutter St., and *for mail*, 2031 Vallejo St., San Francisco, Cal.
- JONES, Edward H. (1889), Cleveland, O., and *for mail*, Clearwater, Fla.
- JONES, Forrest R. (1890), 1702 Melrose Pl., Knoxville, Tenn.
- JONES, Forrest S. (Junior, 1911), Box 52, Hastings, Colo.
- JONES, Frank Cazenove (1891), Pres., W. A. Underhill Brick Co., 103 Park Ave., and 147 W. 70th St., New York, N. Y.
- JONES, Harold C. (Junior, 1903), Asst. to V. P., Inland Steel Co., and 2602 Chicago Rd., Chicago Heights, Ill.

- JONES, Horace Kimball (1896), Life Member; Mech. Supt., Corbin Screw Corp., New Britain, and 722 Asylum Ave., Hartford, Conn.
- JONES, John Emlyn (1907), Engineers Club, 32 W. 40th St., New York, N. Y.
- JONES, John Lucien (Junior, 1911), Catalog Editor, Internatl. Harvester Co. of Am., and *for mail*, 824 Eastwood Ave., Chicago, Ill.
- JONES, John T. (1890), Iron Mountain, Mich.
- JONES, John W. S. (1901), Pres. and Treas., Birmingham Sanitary Bed & Mfg. Co., cor. Ninth Ave. and 40th St., and 1914 Eighth Ave., Birmingham, Ala.
- JONES, Reid (Junior, 1910), Ch. Engr. and Asst. Secy., San Antonio Water Supply Co., San Antonio, Tex., and 45 Portland Pl., St. Louis, Mo.
- JONES, Russell Compton (Junior, 1912), Engrg. Dept., Griscom-Russell Co., 90 West St., and 329 W. 83d St., New York, N. Y.
- JONES, W. Clyde (Junior, 1892), Lawyer, Genl. and Pat. Law, Rm. 1610, 105 W. Monroe St., Chicago, Ill., and 2 Rector St., New York, N. Y.
- JONES, Walter J. (1909), Cons. Engr., 30 Church St., New York, N. Y.
- JONES, William Anthony (1906), Mech. Engr., Babcock & Wilcox Co., and *for mail*, West New Brighton, S. I., N. Y.
- JONES, William R. (1909), Engr. of Constr., Univ. of Pa., 3401 Spruce St., and *for mail*, 550 S. 48th St., Philadelphia, Pa.
- JORDAN, Edward V. (1912), Supt. of Constr., The M. W. Kellogg Co., 50 Church St., New York, N. Y.
- JORDAN, Samuel S. (1897), Naval Arch. and Engr., Scarborough, Me.
- JORDAN, William Allen (1903; 1912), Genl. Mgr., East. Cement Gun Co., 284 DuPont Bldg., and 912 Franklin St., Wilmington, Del.
- JOSLYN, Paul L. (1909), Mech. Engr., Union Iron Wks., and 1791 Pine St., San Francisco, Cal.
- JOUGHINS, George Robert (1910), Supt. M. P., Intercolonial Rys., Moncton, N. B., Canada.
- JOURDIN, Willis Wallace (1912), Ch. Engr. Power Div., Chino Copper Co., Hurley, New Mex.
- JOWETT, J. H. (1907), Genl. Sales Mgr., Ingersoll-Rand Co., 11 Broadway, and 518 W. 111th St., New York, N. Y.
- JOY, Francis B. (Associate, 1895), Genl. Mgr., Detroit Htg. & Ltg. Co., and 340 Garland Ave., Detroit, Mich.
- JOY, Robert (1911), Supt. of Boiler Dept., Kingsford Fdy. & Mch. Wks., Oswego, N. Y.
- JUDD, Horace (1904; 1910), Assoc. Prof. Exper. Engrg., Ohio State Univ., and *for mail*, 281 E. 13th Ave., Columbus, O.
- JUNGGREN, Oscar F. (1910), Engr. Turbine Dept., Genl. Elec. Co., and 16 Rugby Rd., Schenectady, N. Y.
- JUNGHANS, Edward K. (1908), Ch. Engr., Central Mercedita, Ponce, P. R.

- JUNKERSFELD, Peter (1910), Asst. to Second V. P., Commonwealth Edison Co., and *for mail*, 120 W. Adams St., Chicago, Ill.
- JURGENSEN, Jess Christian (Associate, 1905), United Piece Dye Wks., Lodl, N. J.
- JUST, George A. (1904), Cons. Engr., and Pres., George A. Just Co., 239 Vernon Ave., Long Island City, and Empire Hotel, New York, also Scarsdale, N. Y.
- KAHN, Julius (1905), Pres., Trussed Concrete Steel Co., Trussed Concrete Steel Bldg., and *for mail*, 104 Lothrop Ave., Detroit, Mich.
- KALES, Wm. Robert (Junior, 1894), Ch. Engr., Whitehead & Kales Iron Wks., Beecher Ave. and Mich. Central R. R., and *for mail*, 195 Burns Ave., Detroit, Mich.
- KAPY, Artturi A. (Junior, 1903), Factory Inspr., Dist. of Lahti, Lahti, Finland.
- KARR, Ernest M. (Junior, 1905), Bagley & Sewall Co., and *for mail*, 217 S. Pleasant St., Watertown, N. Y.
- KATTE, Edwin Britton (1895; 1901), Manager, 1910-1913; Ch. Engr., Elec. Traction, N. Y. C. & H. R. R. R., 5048 Grand Central Terminal, New York, and Irvington, N. Y.
- KATZENSTEIN, Martin L. (Junior, 1903), Mgr. Marine Dept., Internatl. Steam Pump Co., 115 Broadway, and *for mail*, 52 E. 81st St., New York, N. Y.
- KAUFFMANN, Frederick F. (1911), Asst. to Ch. Engr., N. Y. Shipbuilding Co., and *for mail*, 909 Pine St., Camden, N. J.
- KAUFMAN, Emanuel (Associate, 1902), Metallurgist on Steel, 1123 Park Bldg., and 5815 Fifth Ave., Pittsburgh, Pa.
- KAUP, Wm. Joseph (1900; 1906), Genl. Supvr. Small Tools, Westinghouse Elec. & Mfg. Co., East Pittsburgh, and 423 Hampton Pl., Wilkinsburg, Pa.
- KAVANAUGH, Wm. H. (1902; 1910), Prof. Exper. Engrg., Univ. of Minn., and 124 State St., S. E., Minneapolis, Minn.
- KAVEN, Moses B. (1891), Supt., United Shoe Mchy. Co., and *for mail*, 556 Cabot St., Beverly, Mass.
- KEABLES, Austin Dow (Junior, 1910), with John A. Stevens, Engr., 107 Merrimack St., and *for mail*, 171 Fort Hill Ave., Lowell, Mass.
- KEAN, A. J. A. (1908), Ch. Operating Engr., Guanajuato Power & Elec. Co., Guanajuato, Mex.
- KEARNEY, Alex (1897; 1899), Asst. Supt. M. P., Norfolk & West. Ry., and 1111 Henry St., S. W., Roanoke, Va.
- KEELER, Hugh Edward (Junior, 1912), 503 William St., Ann Arbor, Mich.
- KEELY, Royal R. (1901; 1907), Cons. Management Engr., 1702 Mt. Vernon St., Philadelphia, Pa., and *for mail*, P. O. Box 485, Walpole, Mass.
- KEENAN, Walter Francis, Jr. (Junior, 1912), Asst. Engr., Power Spec. Co., 111 Broadway, New York, N. Y.
- KEEP, William J. (1893), Vice-President, 1903-1905; Supt., Mich. Stove Co., and *for mail*, 753 Jefferson Ave., Detroit, Mich.

- KEIL, Gustave B. (1908), M. M., Federal Elec. Co., Lake and Des-
plaines Sts., and *for mail*, 4109 N. Paulina St., Chicago, Ill.
- KEILHOLTZ, Pierre Otis (1901), Cons. Engr., Continental Bldg.,
and 1610 Bolton St., Baltimore, Md.
- KEITH, Robert R. (1904; Associate, 1911), Asst. Supt., Sheffield
Car Co., and *for mail*, 412 Walnut St., Three Rivers, Mich.
- KEITH, Thomas M. (1905; 1910), Engr., Robins Conveying Belt
Co., 21 Park Row, New York, and *for mail*, 1533 President St.,
Brooklyn, N. Y.
- KELLEMEN, H. F. (1902; 1903), Genl. Mgr., Utica Drop Forge &
Tool Co., 800 Whitesboro St., and *for mail*, 221 Churchill Ave.,
Utica, N. Y.
- KELLER, E. E. (1894), Pres., Detroit Insulated Wire Co., and
for mail, The Pasadena, Detroit, Mich.
- KELLER, Joseph F. (1908), Mgr., Keller Mech. Engraving Co.,
Gair Bldg., 70 Washington St., Brooklyn, and 316 W. 97th
St., New York, N. Y.
- KELLER, W. H. (Junior, 1908), Genl. Supt., Keller Mfg. Co., 21st
St. and Allegheny Ave., Philadelphia, and 214 W. Horter St.,
Germantown, Philadelphia, Pa.
- KELLEY, Frederick Williams (1905), V. P., Helderberg Cement
Co., 100 State St., Albany, N. Y.
- KELLOGG, Alfred S. (1908), Cons. Engr., Boston, and *for mail*,
Waverley, Mass.
- KELLOGG, Harry F. (1909), Mgr. of Sales, Whipple Car Co., Rm.
624, 72 W. Adams St., and 5204 Lexington Ave., Chicago, Ill.
- KELLY, O. W. (1885), Pres., O. S. Kelly Co., and 621 S. Fountain
Ave., Springfield, O.
- KELMAN, John H. (1904), 1574 Crossing St., Chicago, Ill., and
194 Lefferts Pl., Brooklyn, N. Y.
- KEMBLE, Parker H. (1908), Genl. Sales Mgr., Toronto Elec.
Light Co., Toronto, Ont., Canada.
- KENDRICK, J. W. (1911), Ry. Expt., Trinity Bldg., 111 Broad-
way, New York, N. Y., and Steger Bldg., Chicago, Ill.
- KENDRICKEN, Hon. Paul H. (1891), Ingalls & Kendricken, Inc.,
80 Sudbury St., and Parker House, Boston, Mass.
- KENERSON, Wm. Herbert (1904), Prof. Mech. Engrg., Brown
Univ., and 100 Morris Ave., Providence, R. I.
- KENNEDY, Frank Lowell (1903; 1910), Asst. Prof. Drawing and
Mch. Design, Harvard Univ., and *for mail*, 43 Appleton St.,
Cambridge, Mass.
- KENNEDY, Harold H. (Junior, 1907), Ch. Engr., The Waverley
Co., and 2339 N. Capitol Ave., Indianapolis, Ind.
- KENNEDY, Harold J. (Junior, 1912), V. P., The Comerma Co., 4
E. 42d St., New York, N. Y.
- KENNEDY, J. J. (1902), Cons. Engr., 52 Broadway, New York,
and 529 Second St., Brooklyn, N. Y.
- KENNEDY, Julian (1912), Cons. Mech. Engr., 1217 Bessemer
Bldg., Pittsburgh, Pa.
- KENNEDY, M. E. (Junior, 1906), Secy. and Asst. Supt., Kennedy
Valve Mfg. Co., E. Water St., Elmira, N. Y.

- KENNEDY, William A. (Junior, 1908), Testing Engr., Genl. Fire Extinguisher Co., and *for mail* 31 Forest St., Providence, R. I.
- KENNER, Ernest Rodham (Junior, 1912), Clarkston, Ga.
- KENNEY, Lewis H. (1904; 1911), Draftsman-in-Charge Mchy. Div., Navy Yard, Philadelphia, Pa.
- KENRICK, Alfred Eugene (1896), Kenrick Bros., 214 Washington St., and *for mail*, 71 Gorham Ave., Brookline, Mass.
- KENT, Ellis C. (1889), Mech. Engr., Mechanics Bank Bldg., and 106 Montague St., Brooklyn, N. Y.
- KENT, Henry R. (1901), V. P., Westinghouse, Church, Kerr & Co., 10 Bridge St., New York, N. Y., and Gordonhurst Ave., Upper Montclair, N. J.
- KENT, James M. (1900), Elec. and Mech. Engr., Instr. in Applied Steam and Elec., Manual Training H. S., and 2446 Harrison St., Kansas City, Mo.
- KENT, Robert Sayre (1901), Designing, Supvg. and Operating Engr., Mechanics Bank Bldg., and 253 80th St., Brooklyn, N. Y.
- KENT, Robert Thurston (Junior, 1905), Editor, Industrial Engineering, 90 West St., New York, N. Y., and *for mail*, 535 Church St., Bound Brook, N. J.
- KENT, William (1880), Manager, 1885-1888; Vice-President, 1888-1890; 49 Union St., Montclair, N. J.
- KENYON, Alfred Lewis (1904), 1105 Chemical Bldg., St. Louis, Mo.
- KENYON, Wm. Houston (1909), Member of Firm, Kenyon & Kenyon, 49 Wall St., New York, N. Y.
- KEOUGH, William T. (1900), Life Member; Business Agt., Boston Pub. Schs., 168 Tremont St., Boston, and *for mail*, 90 Hastings St., West Roxbury, Mass.
- KERN, Fred. Herbert (Junior, 1912), Ch. Engr., C. Kern Brewing Co., Port Huron, Mich.
- KERR, C. V. (1892), Ch. Engr., McEwen Bros., and *for mail*, 392 N. Main St., Wellsville, N. Y.
- KERR, Eugene W. (1902; 1908), Prof. Mech. Engrg., La. State Univ., and 915 Boyd Ave., Baton Rouge, La.
- KERR, William C. (1909), Constr. Engr., Philadelphia Rapid Transit Co., Ninth and Dauphin Sts., and 3322 N. 17th St., Philadelphia, Pa.
- KESSLER, Armin Geo. (Junior, 1909), Mgr., Lakeside Forge Co., and *for mail*, 557 W. 9th St., Erie, Pa.
- KETCHUM, Samuel (Associate, 1908), Ch. Draftsman, M. H. Treadwell Co., 140 Cedar St., New York, N. Y., and 50 High St., Glen Ridge, N. J.
- KEYES, Frederic Hale (1902), Sanitary Engrg. Co., Rm. 341, 739 Boylston St., Boston, and 407 Central St., Auburndale, Mass.
- KIESEL, William Frederic, Jr. (1907), Asst. Mech. Engr., Pa. R. R., 12th Ave. and 12th St., and *for mail*, 2320 Broad Ave., Altoona, Pa.
- KILGOUR, Dwight Foster (1905; 1909), Mech. Engr. for Chas. E. Cotting, 11 Pemberton Sq., Boston, and *for mail*, Box 129 Lexington, Mass.

- KIMBALL, Dexter Simpson (1900), Prof. Mch. Design and Constr., Sibley College, Cornell Univ., and 23 East Ave., Ithaca, N. Y.
- KIMBALL, Richard D. (1906), 6 Beacon St., Boston, and 304 High St., West Medford, Mass.
- KIMBER, George Alfred (1901; 1903), Mfr., 557-561 W. Jackson Blvd., and 2043 N. 48th Ave., Chicago, Ill.
- KIMMAN, Martin T. (1912), Ch. Engr. and Supt., L. J. McCormick Estate, 332 S. Michigan Ave., and *for mail*, 3352 Douglas Blvd., Chicago, Ill.
- KIND, Morris (1912), Genl. Mgr., Pacific Portland Cement Co., 823 Pacific Bldg., San Francisco, Cal.
- KINDER, J. J. de (1885), Mech. Engr., Atty-at-Law, Franklin Bank Bldg., and *for mail*, The Esmond, Philadelphia, Pa.
- KING, Charles Arthur (Junior, 1911), Asst. Cons. Engr. to Henry C. Meyer, Jr., 1 Madison Ave., New York, N. Y., and *for mail*, 911 Watchung Ave., Plainfield, N. J.
- KING, Charles B. (1912), Ch. Engr., The Marion Steam Shovel Co., Marion, O.
- KING, Chas. G. Y. (1891), Constr. Engr., Commonwealth Edison Co., N. W. Sta., Chicago, and *for mail*, 1020 Sheridan Rd., Wilmette, Ill.
- KING, Charles W. G. (1906), Supt. U. S. Metallic Packing Co., and *for mail*, 429 N. 13th St., Philadelphia, Pa.
- KING, Eugene Whittaker (1912), Mech. Engr., Semet-Solvay Co., and *for mail*, 136 Fitch St., Syracuse, N. Y.
- KING, Frank B. (1892), Cons. Marine Engr. and Naval Arch., 1442 Rhode Island Ave., N. W., Washington, D. C.
- KING, Fred S. (1912), Mgr. Gas Eng. Dept., Natl. Meter Co., 84-86 Chambers St., and *for mail*, P. O. Box 1108, New York, N. Y.
- KING, Geo. Caryl (1908), Asst. in Mch. Design, Purdue Univ., Lafayette, and *for mail*, 403 Wood St., West Lafayette, Ind.
- KING, George I. (1901), Ch. Engr., Middletown Car Co., and *for mail*, North Union St., Middletown, Pa.
- KING, Roy Stevenson (1904; 1910), Ellendale, N. D.
- KING, W. Grant (1894; 1904), Pres., King Sewing Mch. Co., 90 Welland St., and 101 Chapin Parkway, Buffalo, N. Y.
- KINGSBURY, Albert (1892), Cons. Engr., 219 Stratford Ave., Pittsburgh, Pa.
- KINGSBURY, J. G. (1906), Pres. and Treas., Grant Mfg. & Mch. Co., 90 Silliman Ave., Bridgeport, Conn.
- KINGSLEY, Frank (1910), Asst. Engr., Westinghouse, Church, Kerr & Co., New York, and *for mail*, 94 Neptune Park, New Rochelle, N. Y.
- KINKEAD, James A. (Associate, 1903), Res. Sales Mgr., Parkesburg Iron Co., 30 Church St., New York, N. Y., and Stelton, N. J.
- KINNE, Clarence E. (1899), Life Member; Mech. Engr., Bagley & Sewall Co., and *for mail*, 116 S. Indiana Ave., Watertown, N. Y.

- KIPP, Alfred Ristine (1906), Mech. Supt., Soo Line, North Fond du Lac, and R. D. 6, Fond du Lac, Wis.
- KIRBY, Frank E. (1880), Life Member; Engr., 609 Stevens Bldg., Detroit, Mich.
- KIRCHHOFF, Charles (1882), 587 Riverside Drive, New York, N. Y.
- KIRK, Robert H. (1895; 1903), Howland-Kirk Co., New York, and *for mail*, 100 Buckingham Rd., Brooklyn, N. Y.
- KIRK, William Fell (1893), Mgr., McLanahan-Stone Mch. Co., 1005 Allegheny St., Hollidaysburg, Pa.
- KIRKEVAAG, Peter (1886), Life Member; 711 Elm St., Youngstown, O.
- KIRKUP, Joseph P. (1908; 1912), S. K. F. Ball Bearing Co., 50 Church St., and *for mail*, 215 W. 23d St., New York, N. Y.
- KISSICK, Joseph, Jr. (Junior, 1909), Merchant Engr., 1113 Tribune Bldg., and *for mail*, 458 W. 143d St., New York, N. Y.
- KLEIN, Arthur W. (1903; 1911), Assoc. Prof. Mech. Engrg., Lehigh Univ., Williams Hall, South Bethlehem, and *for mail*, 224 S. High St., Bethlehem, Pa.
- KLEIN, Joseph F. (1881), Life Member; Dean of Faculty, Prof. Mech. Engrg., Williams Hall, Lehigh Univ., South Bethlehem, and 357 Market St., Bethlehem, Pa.
- KLEPINGER, John Henry (1907), Asst. Supt. B. and M. Reduction Dept., Anaconda Copper Min. Co., Great Falls, Mont.
- KLIESRATH, Victor William (1912), Ch. Engr., Bosch Magneto Co., 223 W. 46th St., New York, and Port Washington, L. I., N. Y.
- KLINCK, J. Henry (1904), Industrial and Power Dept., Westinghouse Elec. & Mfg. Co., 306 American Bldg., Charlotte, N. C.
- KLOCK, Frank Barnes (Associate, 1907), Solvay Process Co., and *for mail*, 216 N. Lowell Ave., Syracuse, N. Y.
- KLOCKARS, Charles Oscar (Associate, 1911), Supt., Essex Fdy., Murray St. and Ave. D, and *for mail*, 18 Pennington St., Newark, N. J.
- KLUMPP, John Bartleman (1909), Inspc. Engr., United Gas Improvement Co., Broad and Arch Sts., and The Avondale, 39th and Locust Sts., Philadelphia, Pa.
- KNAPP, Edwin C. (Junior, 1893), 180 Furman St., Schenectady, N. Y.
- KNEASS, Strickland L. (1890), Mgr. Injector Dept., Wm. Sellers & Co., 1600 Hamilton St., and 418 S. 15th St., Philadelphia, Pa.
- KNEELAND, Frank H. (Junior, 1909), Assoc. Editor, Coal Age, 505 Pearl St., New York, N. Y.
- KNICKERBACKER, John (1891), Pres., Eddy Valve Co., Waterford, and *for mail*, 86 First St., Troy, N. Y.
- KNIGHT, Alfred H. (1909), Asst. Engr., Packard Motor Car Co., and *for mail*, 227 Edison Ave., Detroit, Mich.
- KNIGHT, Chas. A. (1884), Dir. Babcock & Wilcox, Ltd., Oriel House, Farringdon St., London, E. C., and 20 Hanover Terrace, Regent's Park, London, N. W., England.

- KNIGHT, Charles Donaldson (1912), Elec. Engr., Ch. Engr. Industrial Control Dept., Genl. Elec. Co., Schenectady, N. Y.
- KNIGHT, Geo. Laurence (1905; 1908), Designing Engr., Edison Elec. Ill. Co. of Brooklyn, 360 Pearl St., and 1032-A Sterling Pl., Brooklyn, N. Y.
- KNIGHT, Hervey S. (Associate, 1898), Pat. Lawyer and Expt., 726 Ninth St., N. W., and 30 Piney Branch Rd., Washington, D. C.
- KNISELY, Edw. S. (1906), West. Sales Rep., Bethlehem Steel Co., 1406 First Natl. Bank Bldg., and *for mail*, P. O. Drawer 1039, Pittsburgh, Pa.
- KNISKERN, W. H. (Junior, 1905), Apartado 1, Tremp, Lerida, Spain.
- KNOOP, Theo. M. (Junior, 1904), Salesman, A. M. Lockett & Co., Ltd., Brazos Hotel Bldg., 617 Washington Ave., Houston, Tex.
- KNORR, Karl W. (1910), Member Engrg. Staff, Dodge Mfg. Co., and *for mail*, 904 Homewood Ave., Mishawaka, Ind.
- KNOUS, Franklin F. (1889), 265 Bassett St., New Haven, Conn.
- KNOWLES, Morris (1907), Cons. Engr., 2548 Oliver Bldg., and Dir. Dept. Sanitary Engrg., Univ. of Pittsburgh, and 5814 Stanton Ave., Pittsburgh, Pa.
- KNOWLTON, Frederic K. (Junior, 1904), V. P., M. D. Knowlton Co., and V. P., Auburn Ball Bearing Co., Rochester, and *for mail*, The Pines, East Ave., Pittsford, N. Y.
- KNOWLTON, Winfield B. (1912), Ch. Draftsman, Am. Woolen Co., and *for mail*, 328 Ames St., Lawrence, Mass.
- KNOX, Clarence M. (Junior, 1911), Mech. Engr., 281 Wethersfield Ave., Hartford, Conn.
- KNOX, S. L. Griswold (1892; 1901), V. P. and Genl. Mgr., Natomas Consld. of Cal., 808 Alaska Commercial Bldg., San Francisco, and San Rafael, Cal.
- KOCH, George B. (1909), Asst. Genl. Foreman, South Altoona Foundries, Pa. R. R. Co., and *for mail*, 809 Chestnut St., Altoona, Pa.
- KOENIG, Adolph G. (Associate, 1909), Member of Firm, Mortensen & Co., 114-116 E. 28th St., New York, N. Y., and 43 Eldorado Pl., Weehawken, N. J.
- KOESTER, Herman (Junior, 1911), Mech. Supt., The Bristol Co., and *for mail*, 46 Columbia Blvd., Waterbury, Conn.
- KOHLER, David S. (1900), Genl. Supt., Oliver Iron & Steel Co., and 5646 Bryant St., E. E., Pittsburgh, Pa.
- KOLLBERG, Gustaf Leonard (1910), Engr. Pumping Eng. Dept., Allis-Chalmers Co., and *for mail*, 280 31st St., Milwaukee, Wis.
- KONSTANKEWICZ, Michael John (Junior, 1911), Mech. Engr., Strathmore Paper Co., Mittineague, and 298 Park St., West Springfield, Mass.
- KOPLIN, Robert Deemer (Junior, 1911), Mech. Dept., Lehigh Valley Coal Co., 208 Coal Exch., and *for mail*, Y. M. C. A. Bldg., Wilkes-Barre, Pa.
- KORNFELD, Alfred Ephraim (Associate, 1911), 114 E. 71st St., New York, N. Y.

- KOTHNY, Gottdank Lebrecht (1905; 1912), Mgr., Société Anonyme Westinghouse Agency for G. B., 82 York Rd., Kings Cross, London, N., England, and *for mail*, Technical Adviser, Kawasaki Dockyard Co., Ltd., Kobe, Japan; also, Parkstr. 80, Troppan, Austria.
- KOTTCAMP, John Paul (Junior, 1910), Instr. in Charge Steam Lab., Pratt Inst., and 207 St. James Pl., Brooklyn, N. Y.
- KRAEMER, Milton (Junior, 1910), Assoc. Cons. Engr., The U. S. Gold Dredging & Rubber Co. of Ecuador, S. A., 39 Liberty St., and 65 Park Ave., New York, N. Y.
- KRAMER, Xavier A. (Associate, 1912), Cons. Engr. and Arch., Magnolia, Miss.
- KRANZ, William G. (1909), Mgr. Sharon, Pa., and Melrose Park, Ill. Wks., Natl. Malleable Castings Co.; and 515 E. State St., Sharon, Pa.
- KRAUS, Julius (Junior, 1901), Burlingame, Cal.
- KRAUSE, Arthur E. (1887), Struc. and Mech. Engr., 345 Fairmount Ave., Jersey City, N. J.
- KREBS, A. Sonnin (1901; Associate, 1905), Mech. Engr., 2340 Ash St., Denver, Colo.
- KREHBIEL, Frederick A. (Associate, 1902), Pres., Krehbiel Co., 1712 Marquette Bldg., Chicago, and 188 N. Lincoln Ave., Hinsdale, Ill.
- KREISINGER, Henry (1912), Fuel Engr., Clinchfield Fuel Co., Spartanburg, S. C.
- KREMER, Waldemar Rudolph (1912), Elec. Refrigerating and Mech. Engr., Vilter Mfg. Co., 872 Clinton St., and 679 Marshall St., Milwaukee, Wis.
- KROTO, George (1908), Ch. Mech. Engr., Takata & Co., 57 Bishopsgate, London, E. C., England.
- KRUESI, August H. (1901; Associate, 1904), Engr. of Constr., Genl. Elec. Co., and 7 Adams Rd., Schenectady, N. Y.
- KRUMMEL, Louis C. (1901), Clinton, Conn.
- KRYZANOWSKY, Constant J. (Associate, 1902), Mech. Engrg. Dept., Genl Motors Co., Detroit, Mich.
- KUNHARDT, Lewis Henry (1905), V. P. and Engr., Boston Mfrs.' Mut. Fire Ins. Co., 31 Milk St., Boston, and *for mail*, 303 Franklin St., Melrose Highlands, Mass.
- KUNZE, Edward J. (1907), Asst. Prof. Mech. Engrg., in Charge of Mch. Design and Constr., Mich. Agri. College, East Lansing, Mich.
- KUPFERLE, Edward (1899), Pres., Kupferle Bros. Mfg. Co., 600 N. 2d St., and 5226 Waterman Ave., St. Louis, Mo.
- KUTTER, H. L. (1902; 1907), Secy., Sales Mgr. and Engr., The Black-Clawson Co., and *for mail*, 843 Dayton St., Hamilton, O.
- KUWADA, Gompel (1900), Engr. and Ch. of Distribution Dept., Osaka Gas Co., Osaka, Japan.
- KWANG, Kwong Yung (1899), Life Member; Dir. and Engr., Lincheng Mines, Lin-Tcheng Sien, via Peking, and *for mail*, 7 Race Course Rd., Tientsin, North China.

- LACOUNT, Henry Osgood (1907), Engr. and Asst. Secy. Inspec. Dept., Asso. Factory Mut. Fire Ins. Co., 31 Milk St., Boston, and *for mail*, 124 College Ave., West Somerville, Mass.
- LADD, George Tallman (1896; Associate, 1901), Pres., The George T. Ladd Co., 1620 Farmers Bank Bldg., and The Rittenhouse, Pittsburgh, Pa.
- LADD, Jas. B. (1884), Cons. Engr., Mut. Life Bldg., 1011 Chestnut St., Philadelphia, Pa.
- LAFORE, John Armand (1904), 1211 Noble St., Philadelphia, and *for mail*, Wister Rd., Ardmore, Pa.
- LAGER, Carl Axel (Junior, 1893), Supt., Morris Mch. Wks., Baldwinsville, N. Y.
- LAIDLAW, Walter (1889), Manager, 1905-1908; Member Exec. Com., Internatl. Steam Pump Co., 115 Broadway, New York, N. Y., and 1403 Laidlaw Ave., Bond Hill, Cincinnati, O.
- LAIRD, John A. (1889; 1891), Cons. Engr., Holman & Laird, 1324 Chemical Bldg., and 4965 McPherson Ave., St. Louis, Mo.
- LAIRD, Wilbur G. (Associate, 1906), with Henry L. Doherty, 60 Wall St., New York, N. Y.
- LAKE, Simon (1907), Pres., Lake Torpedo Boat Co., Bridgeport, Conn.
- LAMAR, Philip Rucker (1911), The So. Cotton Oil Co., Savannah Bank & Trust Co. Bldg., Savannah, Ga.
- LAMBIE, James M. (Junior, 1908), Asst. Genl. Mgr., Findlay Clay Pot Co., and *for mail*, 53 E. Beau St., Washington, Pa.
- LAMBSON, DeWitt Clinton (1912), Local Mech. Engr., Am. Thread Co., and *for mail*, 7 Miller Ave., Holyoke, Mass.
- LANCASTER, W. C. (1912), Elec. and Mech. Engr., MacKenzie Mann & Co., Ltd., 411 Dorchester St., W., and 704 Cote St. Antoine Rd., Montreal, Que., Canada.
- LAND, Frank (1900), 721 Lodi St., Syracuse, and care of Mrs. C. L. Land, 205 W. 57th St., New York, N. Y.
- LANDON, A. A. (1902), Genl. Supt. Plants, Am. Radiator Co., 1807 Elmwood Ave., and Lenox Hotel, Buffalo, N. Y.
- LANDRETH, Olin H. (1883), Vice-President, 1885-1886; Prof. Engrg., Union College, and Cons. Engr., Schenectady, N. Y.
- LANE, Almeron M. (1892), Life Member; Plantsville, Conn.
- LANE, Arthur M. (1903), Asst. Engr. Genl. Drawing Room, Am. Loco. Co., and *for mail*, 32 Union Ave., Schenectady, N. Y.
- LANE, Frederick (1906), Supt., Railway Signal Co. of Canada, Ltd., 508 Canadian Express Bldg., Montreal, and *for mail*, 1 Burton Ave., Westmount, P. Q., Canada.
- LANE, Harry Clay (1907), Ch. Draftsman, Md. Steel Co., and *for mail*, 620 "C" St., Sparrows Point, Md.
- LANE, Harry M. (1886), Pres., Lane & Bodley Co., Bond Hill, Cincinnati, O.
- LANE, Henry Marquette (1900), Cons. Fdy. Engr., Pres., The H. M. Lane Co., 18 Piquette Ave., E., Detroit, Mich.
- LANE, J. S. (1882), Mech. Engr., The Engr. Co., 50 Church St., New York, and 245 Arlington Ave., Brooklyn, N. Y.

- LANG, Charles (Junior, 1905), N. Y. Mgr., C. H. Wheeler Mfg. Co., 114 Liberty St., New York, and 348 Jefferson Ave., Brooklyn, N. Y.
- LANG, Charles Arthur (Junior, 1912), Supt., The Northwestern Consltd. Milling Co., and *for mail*, 2429 Lyndale Ave., S., Minneapolis, Minn.
- LANGHE, Heinrich Bartels (Junior, 1910), Mem. of Staff, Suffern & Son, 149 Broadway, New York, N. Y.
- LANGHE, Philip A. (1896), Managing Dir. of Wks., British Westinghouse Elec. & Mfg. Co., Ltd., Trafford Park, Manchester, England.
- LANGEN, George (1906), Wks. Mgr., Cincinnati Planer Co., and 3558 Zennstein Ave., Cincinnati, O.
- LANGER, Paul (1906), Prof. Tech. Hochschule, Aachen, Germany.
- LANGLOTZ, Charles (1894), Mech. Supt., Brooklyn Cooperage Co., 142 Kent Ave., and *for mail*, 888 Lincoln Pl., Brooklyn, N. Y.
- LANGLOTZ, Robert (1894; Associate, 1904), 78 Delevan St., and *for mail*, 396 Third St., Brooklyn, N. Y.
- LANGSTROTH, Clifford B. (Junior, 1912), Mech. Engr., 37 Lake Pl., New Haven, Conn.
- LANGVAND, Ivar L. (Associate, 1909), Ch. Draftsman, Babcock & Wilcox Co., and *for mail*, Barberton Inn, Barberton, O.
- LANZA, Cav. Gaetano (1882), Prof. Emeritus Theor. and Applied Mechanics, Mass. Inst. of Tech.; Engr., Baldwin Loco. Wks., 500 N. Broad St., and *for mail*, The Montevista, 63d and Oxford Sts., Philadelphia, Pa.
- LAPAT, Leopold (Junior, 1908), Erecting Engr., Henry R. Worthington, Harrison, and *for mail*, 249 Godwin St., Paterson, N. J.
- LAPE, Willard E. (1890), Mech. Engr., Syracuse Heater Co., 227 Walton St., Syracuse, N. Y.
- LARDNER, Henry A. (1901), Mgr., J. G. White & Co., Inc., Alaska-Commer. Bldg., San Francisco, Cal.
- LARKIN, A. C. (1895; 1905), Asst. Mgr., Canada, Babcock & Wilcox, Ltd., St. Henry, Montreal, P. Q., Canada.
- LARKIN, Everett P. (Junior, 1906), U. S. Metal Products Co., College Point, N. Y.
- LARKIN, Fred A. (1888), 570 Ocean Ave., Flatbush, L. I., N. Y.
- LARKIN, William H., Jr. (1904), Mech. Engr., Revere Rubber Co., and 91 Tudor St., Chelsea, Mass.
- LARNER, Chester W. (1907; 1912), Hyd. Engr., Wellman-Seaver-Morgan Co., Cleveland, O.
- LARSSON, Thure L. F. (1905), Mech. Engr., 34 Holden St., Worcester, Mass.
- LATHAM, Harry M. (1908), Mgr. Power Apparatus Dept., B. F. Sturtevant Co., Hyde Park, Mass.
- LATHROP, William Frederic (Junior, 1905), Asst. to Ch. Engr. of Power Plant, The Milwaukee Elec. Ry. & Ltg. Co., 316 Pub. Service Bldg., and 338 Greenbush St., Milwaukee, Wis.
- LATON, Thomas J. (Junior, 1908), Instr. in Drawing, N. H. College, Durham, N. H.

- LATTA, Nisbet (Junior, 1902), V. P., Wis. Eng. Co., Corliss, Wis.
- LATTIN, Judson (1891), M. M., Internatl. Harvester Co. of Canada, Ltd., and *for mail*, 96 Ontario Ave., Hamilton, Ont., Canada.
- LAUDER, George B. (Junior, 1897), Cons. Elec. Engr., Concord, N. H.
- LAUER, Conrad N. (Associate, 1903), Genl. Mgr., Day & Zimmermann, Washington Bldg., 608 Chestnut St., Philadelphia, and 4918 Greene St., Germantown, Philadelphia, Pa.
- LAUGHLIN, Alex., Jr. (Junior, 1911), Engr., Alex. Laughlin & Co., Lewis Bldg., Pittsburgh, and Sewickley, Pa.
- LAVERY, George L. (1886), 5453 Kenmore Ave., Chicago, Ill.
- LAW, Frank E. (1911), V. P., The Fidelity & Casualty Co., New York, N. Y., and *for mail*, 322 Claremont Ave., Montclair, N. J.
- LAWRENCE, Howard F. (Junior, 1908), Am. Engrg. Co., Philadelphia, Pa.
- LAWRENCE, J. W. (1892), Prof. Mech. Engrg., State Agri. College, Fort Collins, Colo.
- LAWRENCE, John Henry (Junior, 1911), Asst. to Mech. Engr., N. Y. Edison Co., 55 Duane St., New York, N. Y.
- LAWRENCE, Samuel Eugene (Junior, 1909), Junior Mech. Engr., U. S. Engrs. Dept., care of U. S. Engrs. Office, Galveston, Tex., and 723 N. 12th St., Ft. Smith, Ark.
- LAWRENCE, Schuyler (1902), Cons. Min. Engr., P. O. Box 3, and 116, Calle 39, Chihuahua, Mex.
- LAWTON, James Edmund (1912), Ch. Inspr., Isthmian Canal Com., Washington, D. C.
- LAWTON, M. A. (1893), Treas., A. J. Morse & Son, Inc., 221 High St., Boston, Mass.
- LAYAT, Felix (1912), Mech. Engr. and Ch. of Wks. Constr. Dept., N. J. Zinc Co., Palmerton, Pa.
- LAZELL, Ellis Warren (1912), Cons. Engr., Edwards & Lazell, 426 Ry. Exch. Bldg., and 1118 Vaughn St., Portland, Ore.
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- LEAHY, Frank E. (Junior, 1909), Asst. Steam and Hyd. Engr., Natl. Tube Co., McKeesport, Pa.
- LEAMAN, Charles Henry (Junior, 1910), Mech. Engr., Lehigh Coal & Navigation Co., Lansford, and *for mail*, 544 E. Broad St., Tamaqua, Pa.
- LÈAUTÉ, Henry (Honorary, 1891), Member, Academy of Science, 25, Rue 4 de Septembre, and *for mail*, Blvd. de Courcelles, 20, Paris, France.
- LEAVITT, E. D. (1880), Vice-President, 1881-1882; President, 1882-1883; Cons. Engr., Ret., 33 Garden St., Cambridge, Mass.
- LEAVITT, Frank M. (1887), Cons. Engr., 133 Plymouth St., Brooklyn, N. Y.
- LeBLOND, John A. (1907), Supt., R. K. LeBlond Mch. Tool Co., 4609 Eastern Ave., Cincinnati, O.

- LeBLOND, Richard K. (1900), Pres., R. K. LeBlond Mch. Tool Co., 4609 Eastern Ave., and Madison Rd. and Vista Pl., Cincinnati, O.
- LEBRECHT, A. (1910), Cons Engr., Hefnersplatz 3, and Lenbachstr. 4, Nuremberg, Germany.
- LE CONTE, Joseph Nisbet (1906), Prof. Engrg. Mechanics, Univ. of Cal., Mechanics Bldg., and 19 Hillside Court, Berkeley, Cal.
- LEDoux, J. W. (1910), Ch. Engr., Am. Pipe & Constr. Co., 112 N. Broad St., Philadelphia, and Swarthmore, Delaware Co., Pa.
- LEE, Ernest Eugene (Associate, 1908), Supt. of Erection, Dept. of Constr. and Engrg., Isthmian Canal Com., Culebra, C. Z., Panama, C. A.
- LEE, Francis V. T. (1907), Cons. Engr., Victoria, B. C., Canada.
- LEE, Nixon (Junior, 1910), Supt. Mch. Dept., Jaburg Bros., 536 Broome St., New York, and *for mail*, 450 Hancock St., Brooklyn, N. Y.
- LEE, Ralph A. (Junior, 1909), Engr. Mfg. Dept., Barrett Mfg. Co., 17 Battery Pl., New York, and *for mail*, 578 75th St., Brooklyn, N. Y.
- LEE, Wm. F. (1907), Ch. Engr., C. W. Hunt Co., West New Brighton, S. I., N. Y.
- LEE, William States (1907), Ch. Engr., So. Power Co., Trust Bldg., Charlotte, N. C.
- LEEPER, Ralph W. (Junior, 1908), Genl. Elec. Co., Provident Bank Bldg., Cincinnati, O.
- LEES, Ernest J. (1907), Pres., The Lees-Bradner Co., 6210 Carnegie Ave., and *for mail*, 10,829 Superior Ave., Cleveland, O.
- LEES, John Walter (1908), Genl. Supt., Inland Steel Co., Indiana Harbor, Ind.
- LEGGETT, George R. (1912), Asst. to Genl. Supt., Scovill Mfg. Co., and *for mail*, 141 Chestnut Ave., Waterbury, Conn.
- LEIBERT, John (1900), Supt. of Forge, Bethlehem Steel Co., South Bethlehem, and *for mail*, 141 S. New St., Bethlehem, Pa.
- LEIGH, Robert E. (Junior, 1912), Plant Engr., Charles F. Noyes Co., 92 William St., and *for mail*, 217 W. 128th St., New York, N. Y.
- LEIGHTON, Edward I. (1892), 1183 East Blvd., Cleveland, O., and *for mail*, St. Augustine, Fla.
- LEISEN, Theodore Alfred (1911), Ch. Engr. and Supt., Louisville Water Co., 435 Third St., and 37 Hill Rd., Castlewood, Louisville, Ky.
- LEITCH, Meredith (1898), Mech. Engr., De Laval Separator Co., Poughkeepsie, N. Y.
- LELAND, Frederic H. (1907), Comptroller, Stand. Roller Bearing Co., 5001 Lancaster Ave., Philadelphia, and *for mail*, 122 Elmwood Ave., Narberth, Pa.
- LELAND, George B. (Associate, 1907), Supt., Stamford Gas & Elec. Co., 11 Bank St., and *for mail*, 200 North St., Stamford, Conn.

- LELAND, Henry Martin (1895), Manager, 1912-1915; Genl. Mgr., Cadillac Motor Car Co., 1343 Cass Ave., and *for mail*, 2984 Grand Boulevard, W., Detroit, Mich.
- LELAND, Sanford Daniels (1900), Pres. and Genl. Mgr., Mfg. Equip. & Engrg. Co., 209 Washington St., Boston, and *for mail*, 6 Arlington Rd., Wellesley Hills, Mass.
- LELAND, William Emmons (1904), Cons. Engr., 832 Merchants Exch., San Francisco, and Berkeley, Cal.
- LEMOINE, L. R. (Associate, 1887), Pres., U. S. Cast Iron Pipe & Fdy. Co., 1421 Chestnut St., and 1934 Locust St., Philadelphia, Pa.
- LEMON, John C. (1902), Mech. Engr., 2844 Linwood Ave., Cincinnati, O.
- LENFEST, Bertram A. (1904), Mech. Engr., 1524 76th St., Brooklyn, N. Y.
- LENT, Leon B. (1905), Constr. Engr., Ford Motor Co., Detroit, Mich., and Brewster, N. Y.
- LEONARD, Arthur G. (1890), Pres., Union Stock Yard & Transit Co. of Chicago, Union Stock Yds., and 4801 Woodlawn Ave., Chicago, Ill.
- LEONARD, E. Ibbotson (Junior, 1906), Asst. Supt., E. Leonard & Sons, London, Ont., Canada.
- LEONARD, Merton S. (1912), Ch. Engr., B. F. Sturtevant Co., and *for mail*, 24 New Bedford St., Hyde Park, Mass.
- LEONARD, Stephen Rose (1912), Second V. P., Oneida Community, Ltd., and *for mail*, Kenwood, Oneida, N. Y.
- LEPPER, John G. (1902), Cons. Engr., P. O. Box 547, and 58 Johnson St., Waterbury, Conn.
- LESLEY, Everett Parker (1912), Asst. Prof. Mech. Engrg., Leland Stanford Jr. Univ., Stanford University, Cal.
- LESSER, W. H. (Junior, 1911), Mech. Engr., Philadelphia & Reading Coal & Iron Co., and *for mail*, 604 N. 3d St., Pottsville, Pa.
- LESTER, Bernard (1906; Associate, 1909), Sales Engr., Westinghouse Elec. & Mfg. Co., East Pittsburgh, and *for mail*, Amber Club, 123 N. Negley Ave., Pittsburgh, Pa.
- LESTER, Clarence R. (1910), Inspr. Sales Dept., Packard Motor Car Co., and *for mail*, Plaza Hotel, Detroit, Mich.
- LEUTWILER, Oscar A. (1904; 1911), Asst. Prof. Mch. Design, Univ. of Ill., and *for mail*, 511 W. Green St., Urbana, Ill.
- LEVIN, Arvid Michael (1894), Mech. Engr., 925 Monadnock Bldg., and 1542 La Salle Ave., Chicago, Ill.
- LEWIS, Arthur Lighton (Junior, 1912), with L. F. Fales, and Lewis Ave., Walpole, Mass.
- LEWIS, David J., Jr. (1892), Sales Mgr., Lytton Mfg. Corp., 1159 Hudson Terminal Bldg., 50 Church St., New York, N. Y., and *for mail*, 88 Riggs Pl., South Orange, N. J.
- LEWIS, Frederick Humphreville (1911), Cons. Engr., 732 Brown-Marx Bldg., Birmingham, Ala.
- LEWIS, John Ernest (Junior, 1909), P. O. Box 227, Paonia, Colo.

- LEWIS, Joseph E. (Junior, 1899), Cons. Engr., 1601 Moreland Ave., Baltimore, Md.
- LEWIS, Rollin C. (1890), Asst. Supt. Bank Lock Dept., Yale & Towne Mfg. Co., and 290 Atlantic St., Stamford, Conn.
- LEWIS, Wilfred (1884), Vice-President, 1901-1903; Life Member; Pres., Tabor Mfg. Co., 18th and Hamilton Sts., and *for mail*, 5901 Drexel Rd., Philadelphia, Pa.
- LEWIS, Wm. Yorath (1902), Cons. Engr., 49 Queen Victoria St., London, E. C., and Cartref 64 Park Rd., Southend-on-Sea, Essex, England.
- LIBBEY, Joseph Harold (1901; 1904; 1908), Mech. and Elec. Engr., Stone & Webster Engrg. Corp., 147 Milk St., Boston, and *for mail*, 14 Parsons St., West Newton, Mass.
- LIBBY, Charles Leon (1900), V. P. and Supt., Internatl. Mch. Tool Co., and 2218 N. Capitol Ave., Indianapolis, Ind.
- LIBBY, Malcolm (1902; 1905; 1909), P. O. Box 235, Edmonton, Alberta, Canada.
- LIBBY, Sam. H. (1897; 1900), Engr. Hoist. Dept., Sprague Elec. Wks., Bloomfield, and *for mail*, 23 Whittelsey Ave., East Orange, N. J.
- LICHTENSTEIN, Valentine (Junior, 1912), Supt., The Fish Net & Twine Co., and *for mail*, 1618 Monument Ave., Richmond, Va.
- LIDE, Martin James (1912), Cons. Engr., Woodward Bldg., Birmingham, Ala.
- LIEB, John W., Jr. (1886), Manager, 1903-1906; Vice-President, 1906-1908; Third V. P. and Assoc. Genl. Mgr., N. Y. Edison Co., 55-57 Duane St., and 437 W. 23d St., New York, N. Y.
- LIGHTHIPE, Wm. W. (1907), Mgr. Repair Dept., Asst. to Genl. Sales Mgr., Otis Elev. Co., Otis Elev. Bldg., 11th Ave. and 26th St., New York, and 530 First St., Brooklyn, N. Y.
- LILLIBRIDGE, Ray D. (Associate, 1907), Pres., Ray D. Lillibridge, Inc., 2109 Trinity Bldg., 111 Broadway, New York, N. Y.
- LILLIE, Grant W. (Junior, 1901), Asst. Supt., Oregon Short Line R. R. Co., Pocatello, Idaho.
- LINCH, Edward P. (1902), 4000 Baltimore Ave., Philadelphia, Pa.
- LINCOLN, Paul Martyn (1907), Genl. Engr., Westinghouse Elec. & Mfg. Co., P. O. Box 911, and 6830 Thomas Blvd., Pittsburgh, Pa.
- LINDBERG, Fritz A. (1908; 1911), Member of Firm, Brill & Gardner, Engrs., 1135 Marquette Bldg., and *for mail*, 514 E. 62d St., Chicago, Ill.
- LINDQUIST, Edward W. (1902; 1905), Sales Engr., Allis-Chalmers Co., and *for mail*, 2257 N. Kedzie Blvd., Chicago, Ill.
- LINDQUIST, Eric Adolf (Junior, 1911), Middletown, Conn.
- LINDSAY, W. Edward (1895), Cons. Engr., 9 W. 91st St., New York, N. Y.
- LINDSTROM, Charles A. (1891), Ch. Engr., Pressed Steel Car Co., McKees Rocks, and West. Steel Car & Fdy. Co. of Chicago, Ill., and 138 Stratford Ave., E. E., Pittsburgh, Pa.

- LINDSTROM, J. A. (1911), Struc. Engr., Genl. Chem. Co., 25 Broad St., New York, and *for mail*, 95 Seventh Ave., Brooklyn, N. Y.
- LINDSTROM, Nils Oscar (1903), Supt., A. B. See Elec. Elev. Co., Pacific Ave. and Forest St., Jersey City, and *for mail*, 121 High St., West Nutley, N. J.
- LIPPS, Henry, Jr. (1888; 1891), Contr. Engr., 683 Rosewood St., Williamsbridge, New York, and *for mail*, 127 Park Ave., Mt. Vernon, N. Y.
- LISTER, Robt. Ramsbottom (1894), Life Member; Prop., Greenbank Steam Laundry, Gatley, Cheshire, and *for mail*, 11 Athol Rd., Alexandra Park, Manchester, England.
- LITTLE, Arthur Dehon (1912), Chem. Engr., Pres. and Mgr., Arthur D. Little, Inc., 93 Broad St., Boston, and 107 Upland Rd., Brookline, Mass.
- LITTLE, Chas. Henry (Associate, 1904), Mgr., Universal Drafting Mch. Co., Cleveland, and *for mail*, 29 Rosalind Ave., East Cleveland, O.
- LIVINGSTON, Robert R. (1906), Cons. and Constr. Engr., 2 Rector St., and *for mail*, 605 W. 111th St., New York, N. Y.
- LOBBEN, Peder (1895), Mech. Engr., 289 A St., Boston, Mass.
- LOBER, William D. (1911), Secy. and Treas., Vulcanite Portland Cement Co., 1230 Land Title Bldg., Philadelphia, Pa.
- LOCKERY, Charles E. (Associate, 1911), Staff Asst., F. W. Bird & Co., East Walpole, and *for mail*, Plimpton St., Walpole, Mass.
- LOCKETT, Andrew Moore (1900), Pres., A. M. Lockett & Co., Ltd., 533 Baronne St., and 1639 Robert St., New Orleans, La.
- LOCKETT, Kenneth (1904; Associate, 1907), V. P., Orr & Lockett Hdw. Co., 14-16 W. Randolph St., and 5116 Madison Ave., Chicago, Ill.
- LOCKWOOD, Burns D. (1907), Asst. Ch. Engr., Pressed Steel Car Co., McKees Rocks, and *for mail*, 444 Dawson Ave., Bellevue, Pa.
- LOCKWOOD, Edwin H. (1890; 1903), Asst. Prof. Mech. Engrg., S. S. S., Yale Univ., and *for mail*, 52 Division St., New Haven, Conn.
- LOCKWOOD, James Fred (1889; 1907), Mgr., Security Elev. Safety Co., 126 W. 18th St., New York, and *for mail*, 678 McDonough St., Brooklyn, N. Y.
- LOCKWOOD, Rutherford T. (Junior, 1904), Asst. Supt., Sone & Fleming Wks., Stand. Oil Co. of N. Y., Kingslands and Meserole Ave., and *for mail*, 144 Milton St., Brooklyn, N. Y.
- LODETTI, Frank Emil (Junior, 1902), Cons. Engr., via Pallavicino 29, Milan, Italy.
- LODGE, Wm. (1890), Pres., Lodge & Shipley Mch. Tool Co., 3055 Colerain Ave., and 800 Ridgway Ave., Cincinnati, O.
- LOEB, Leo (Junior, 1911), Mech. Engr., Naval Engrg. Exper. Sta., Annapolis, Md.
- LOEPSINGER, Albert John (Junior, 1908), Mech. Engr., Genl. Fire Extinguisher Co., and *for mail*, 41 Atlantic Ave., Providence, R. I.

- LOFTS, David (1901), Constr. Engr., Am. Steel Foundries, and *for mail*, 4467 Woodlawn Ave., Chicago, Ill.
- LOGAN, Frank J. (1894), V. P. and Treas., Logan Iron Wks., Commercial St., and 285 DeKalb Ave., Brooklyn, N. Y.
- LOGAN, James (Associate, 1904), First V. P. and Genl. Mgr., U. S. Envelope Co., 75 Grove St., and *for mail*, 222 Salisbury St., Worcester, Mass.
- LOGAN, John D. (1892), Life Member; Cons. Engr., P. O. Box 223, Hillsdale, N. Y.
- LOGAN, John W. (1894; 1899; 1904), Mgr. Steel Wks. Dept., Alan Wood, Iron & Steel Co., Conshohocken, Pa.
- LOGAN, Wm. J. (1880), Life Member; Logan Iron Wks., Commercial and Clay Sts., Brooklyn, N. Y.
- LONDON, William James Albert (1910), Ch. Engr., Terry Steam Turbine Co., Hartford, Conn.
- LONG, Jeremiah C. (1905), Ch. Engr., Boston Woven Hose & Rubber Co., Cambridgeport, and *for mail*, 2 Emery St., Everett, Mass.
- LONGACRE, Fredk. v. D. (1911), Ch. Engr. Gas and Elec. Dept., Ingersoll-Rand Co., 11 Broadway, New York, N. Y.
- LONGENECKER, Charles (1892), Pres., Chas. Longenecker & Co., 150 Nassau St., New York, and 46 Sidney Pl., Brooklyn, N. Y.
- LONGSTRETH, Charles (1899), Pres. U. S. Metallic Packing Co., 427 N. 13th St., Philadelphia, and Lansdowne, Pa.
- LONGWELL, Henry E. (1901), Cons. Engr., Westinghouse Mch. Co., East Pittsburgh, and 206 N. Homewood Ave., Pittsburgh, Pa.
- LOOMIS, Burdett, Jr. (1904), 843 Prospect Ave., Hartford, Conn.
- LORD, Charles Edward (1909), Genl. Pat. Atty., Internatl. Harvester Co., 606 S. Michigan Ave., Chicago, and 1037 Ashland Ave., Wilmette, Ill.
- LORD, John E. (1904), Dist. Mgr., Buckeye Eng. Co., 1249 Marquette Bldg., and *for mail*, 6502 Peoria St., Chicago, Ill.
- LORENZ, Wm. A. (1899), Mech. Engr. and Solicitor of Patents, 60 Prospect St., and 96 Garden St., Hartford, Conn.
- LORING, Ernest Johnson (1912), Designer, Turbine Nozzles and Buckets, Genl. Elec. Co., Lynn, and *for mail*, 76 Highland Ave., Somerville, Mass.
- LORING, Harrison, Jr. (1910), Treas. and Mech. Engr., R. S. Brine Transportation Co., 43 India St., Boston, and 31 Crawford St., Roxbury, Mass.
- LORSCH, Edwin S. (1903), Member of Firm, Sussfeld, Lorsch & Co., 90-94 Maiden Lane, and 2 W. 89th St., New York, N. Y.
- LOSS, Henrik V. (1892), Cons. Engr., North Am. Bldg., Philadelphia, Pa.
- LOTHROP, Marcus T. (Junior, 1908), Timken Roller Bearing Co., Canton, O.
- LOUD, Henry S. (1901), Ch. Engr., U. S. Wood Preserving Co., 165 Broadway, New York, N. Y.

- LOUER, Lewis S. (Associate, 1900), West. Mgr., F. W. Dodge Publishing Co., 842 Monadnock Bldg., Chicago, Ill.
- LOUTREL, Cyrus Henry (Junior, 1912), Asst. Factory Mgr., Natl. Lock Washer Co., and *for mail*, 65 Johnson St., Newark, N. J.
- LOVEJOY, Frank Wm. (Junior, 1901), Genl. Mgr. Mfg. Depts., Eastman Kodak Co., and Seneca Parkway, Rochester, N. Y.
- LOVELL, Alfred (1899), Cons. Engr., 619 Harrison Bldg., and 31 Sellers Ave., Kingsessing Sta., Philadelphia, Pa.
- LOW, Fred. R. (1886; 1912), Editor, Power, 505 Pearl St., New York, N. Y., and 256 Harrison St., Passaic, N. J.
- LOWE, Henry Leland (Junior, 1903), Genl. Motors Co., and *for mail*, 245 Parker Ave., Detroit, Mich.
- LOWE, Wm. Vose (1889; 1892), Engr. and Salesman, Hess-Bright Mfg. Co., Philadelphia, Pa., and *for mail*, Box 387, 27 Mechanic St., Fitchburg, Mass.
- LOYD, John (1899), Pres., John Loyd Co., 558-562 Water St., New York, and 507 Bedford Ave., Brooklyn, N. Y.
- LUCAS, Henry M. (1904), Lucas Mch. Tool Co., E. 93th St. and L. S. & M. S. R. R., Cleveland, and *for mail*, 82 Page Ave., East Cleveland, O.
- LUCKE, Charles E. (1903; 1908), Prof. Mech. Engrg., Columbia Univ., and 544 W. 142d St., New York, N. Y.
- LUCKER, Grover Cleveland (Junior, 1907), Agt., Ingersoll-Rand Co., 65 Oliver St., Boston, and *for mail*, 42 Liberty Ave., Somerville, Mass.
- LUDEMAN, Edwin Henry (Associate, 1904), Steam Engr., 165 Broadway, New York, and *for mail*, 810 E. 19th St., Brooklyn, N. Y.
- LUDLOW, Charles G. (1902), West. Mgr., Crosby Steam Gate & Valve Co., Great Lakes Bldg., 180 N. Market St., and 743 Montrose Ave., Chicago, Ill.
- LUDY, Llewellyn V. (1905), Prof. Exper. Engrg., Purdue Univ., and 229 University St., Lafayette, Ind.
- LUEHRS, Daniel Michael (Junior, 1907), Ch. Engr. and Factory Mgr., McCreery Engrg. Co., and *for mail*, 282 Park View Ave., Detroit, Mich.
- LUFKIN, Elgood Chauncey (1896), V. P., The Tex. Co., 17 Battery Pl., New York, N. Y.
- LUHR, Otto (1907), Cons. Engr., 154 W. Randolph St., and *for mail*, 1019 Irving Park Blvd., Chicago, Ill.
- LUMMIS, Charles W. (Associate, 1907), Scovill Mfg. Co., and *for mail*, 445 Willow St., Waterbury, Conn.
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- LUNDGREN, Charles G. (1910), M. M., Natl. Tube Co., and *for mail*, 1018 Eighth St., Lorain, O.
- LUNGER, Waldo G. (1901; 1911), Mgr. Furnace Dept., Am. Shop Equip Co., 332 S. Michigan Ave., Chicago, and 933 Hinman Ave., Evanston, Ill.

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- LUTHER, Stephen Grinnell (1907), Supt. Mill No. 2, U. S. Rubber Reclaiming Wks., 724 Babcock St., and *for mail*, 469 Prospect Ave., Buffalo, N. Y.
- LYALL, Wm. L. (1887; 1893), Treas., Brighton Mills, and 349 Ayerigg Ave., Passaic, N. J.
- LYDECKER, Kenneth (Junior, 1911), P. C. Stuart Co., 1123 Broadway, New York, N. Y.
- LYLE, Joel Irvine (1906), Mgr., Carrier Air Conditioning Co., 39 Cortlandt St., New York, N. Y., and 1200 W. 7th St., Plainfield, N. J.
- LYMAN, Dwight E. (1901), Supt., Asa S. Cook Co., 80 Huyshope Ave., and 30 Annawan St., Hartford, Conn.
- LYMAN, Elihu Root (Junior, 1904), Asst. Wks. Mgr., Dexter Folder Co., Pearl River, N. Y.
- LYMAN, James (1899), Sargent & Lundy, cor. Jackson and Michigan Blvds., Chicago, and 1308 Maple Ave., Evanston, Ill.
- LYON, Tracy (1893), Dir. of Production, Genl. Motors Co., Detroit, Mich.
- LYONS, James W. (1902), Pres., Lyons Boiler Wks., DePere, Wis.
- McALLISTER, Daniel Handley (1911), Constr. Supt., Utah Power & Light Co., 1015 New House Bldg., Provo City, Utah.
- McARTHUR, Arthur Royal (1906), Res. Engr., Am. Sheet & Tin Plate Co., and *for mail*, 674 Harrison St., Gary, Ind.
- McARTHUR, Robt. (1894), 34 Jefferson St., Biddeford, Me.
- McBANE, Walter Watson (Associate, 1908), Asst. Engr., The Conn. Co., Griswold Bldg., and *for mail*, 1287 Chapel St., New Haven, Conn.
- McBRIDE, James (1886), Life Member; Ch. Engr., Stamford Mfg. Co., and *for mail*, 80 Greyrock Pl., Stamford, Conn.
- McBRIDE, Thomas C. (1908), Sales Mgr., Internatl. Steam Pump Co., North Am. Bldg., and 240 W. Cheltenham Ave., Philadelphia, Pa.
- McCANN, Warren Edward (Junior, 1910), Asst. to Supt. of Foundries, Bethlehem Steel Co., South Bethlehem, and *for mail*, 109 E. Washington Lane, Germantown, Philadelphia, Pa.
- McCARTE, Alexander James (Junior, 1912), Mech. Engr., Ideal Cocoa & Chocolate Co., and *for mail*, P. O. Box 148, Lititz, Pa.
- McCARTHY, Harry (1909), Ch. Draftsman, Natl. Tube Co., and *for mail*, 600 E. Prospect St., Kewanee, Ill.
- McCARTY, Frank James (Junior, 1912), Designing Engr., Tate, Jones & Co., Inc., 1007 Empire Bldg., Pittsburgh, and *for mail*, 17 Center Ave., Ingram, Pa.
- McCARTY, Richard J. (1901), V. P., K. C. So. Ry. Co., Thayer Bldg., and *for mail*, 3820 Warwick Blvd., Kansas City, Mo.
- McCLATCHEY, A. F. (1889), 132 N. 4th St., Aurora, Ill.
- McCLELLAN, William (1905), V. P., The Campion McClellan Co., Cons. Engr., Public Service Com., Second Dist., 90 West St., New York, and University Club, Albany, N. Y.

- McCLELLAND, E. S. (1891; 1898), Engr. Gas and Steam Engs., The Westinghouse Mch. Co., and *for mail*, 6837 Thomas Blvd., Pittsburgh, Pa.
- McCLINTOCK, Edward H. (1901; 1905), Engr. and Arch., McClintock & Craig, 33 Lyman St., Springfield, and Westfield Rd., West Springfield, Mass.
- McCLURE, O. D. (1907), M. M., Cleveland-Cliffs Iron Co., Ishpeming, Mich.
- McCOLL, J. R. (1903), Member of Firm, Ammerman, McColl & Anderson, Cons. Engrs., 1310 Penobscot Bldg., and Dean Engrg. Dept., Univ. of Detroit; also 9 Gladstone Ave., Detroit, Mich.
- McCOLLUM, Caleb Addison (Junior, 1911), Exper. Engr., Carnegie Steel Co., Homestead Steel Wks., Munhall, and *for mail*, 463 Ella St., Wilkinsburg, Pa.
- McCOY, William (Junior, 1903), Mech. Engr., Am. Encaustic Tiling Co., and *for mail*, 409 Locust Ave., Zanesville, O.
- McCRARY, John Adger (1912), Draftsman and Asst. to Genl. Supt., The Mathieson Alkali Wks., Saltville, Va.
- McCREERY, James Harold (Junior, 1910), 802 Atlantic Bldg., 49 Wall St., New York, N. Y., and *for mail*, 415 W. 7th St., Plainfield, N. J.
- McCULLOCH, Alexander (1912), New London Ship & Eng. Co., and *for mail*, P. O. Box 727, New London, Conn.
- McCULLOCH, John A. (1912), Engr. Galvanizing Plant, Natl. Wks., Natl. Tube Co., and *for mail*, Juniper and 2d Sts., Versailles Sta., McKeesport, Pa.
- McDEVITT, Frank J. (Junior, 1906), Dist. Mgr., Elliott Co., and Liberty Mfg. Co. of Pittsburgh, Pa., 351 Pierce Bldg., St. Louis, Mo.
- McDEWELL, Horatio S. (Junior, 1908), Gas Eng. Erecting Engr., Allis-Chalmers Co., Milwaukee, Wis., and *for mail*, The Admaston, 251 W. 89th St., New York, N. Y.
- McDOUGALL, Andrew Horace (1908), Ch. Engr., Whiting Fdy. Equip. Co., and *for mail*, 119 155th St., Harvey, Ill.
- McELROY, James Finney (1900), Cons. Engr., Consltd. Car Htg. Co., 423 N. Pearl St., and *for mail*, 131 Lake Ave., Albany, N. Y.
- McELROY, Joseph A. (1895), Genl. Municipal and R. R. Contr., Wall St., and *for mail*, Elmcrest, Norwalk, Conn.
- McEWEN, J. H. (1882), Pres. and Genl. Mgr., McEwen Bros., Wellsville, N. Y.
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- McFARLAND, A. R. (1902), Wks. Mgr., Solvay Process Co., and 609 Willis Ave., Syracuse, N. Y.
- McFARLAND, Walter M. (1883), Vice-President, 1905-1907; Babcock & Wilcox Co., 85 Liberty St., New York, N. Y.
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- McGIFFERT, John Rutherford (1907), Secy. and Treas., Clyde Iron Wks., 29th Ave., W., and Michigan St., and 2324 E. 5th St., Duluth, Minn.

- McGLONE, Roy G. (Junior, 1909), U. S. Junior Mech. Engr., U. S. Engr. Dept., Trust Co. Bldg., and 213½ Tremont St., Galveston, Tex.
- McGREGOR, Alexander Grant (1905; 1912), Member of Firm, Repath & McGregor, Engrs., Douglas, Ariz.
- McGREGOR, Hugh R. (1903), Mech. Supt., Brown & Sharpe Mfg. Co., and *for mail*, 75 Holden St., Providence, R. I.
- McGREGOR, John A. (1902), Pres., Union Twist Drill Co., and *for mail*, 1328 Main St., Athol, Mass.
- McGWIRE, Charles H. (1909), Cons. Mech. and Elec. Engr., 507 San Pedro St., and *for mail*, 1423 Covert Pl., Los Angeles, Cal.
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- McINTOSH, Samuel Fraser (1912), Constr. Engr., 534 Industrial Trust Bldg., and 11 Cypress St., Providence, R. I.
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- McINTOSH, William (1902), 25 Willow Ave., Plainfield, N. J.
- McJILTON, John Perkins (Junior, 1910), Draftsman, Loco. Superheater Co., 30 Church St., and *for mail*, 4293 Park Ave., New York, N. Y.
- McKEAN, Robert Andrews (1895), Supt. Keystone Wks., Jones & Laughlin Steel Co., 3140 Second Ave., and *for mail*, 714 S. Negley Ave., Pittsburgh, Pa.
- McKECHNIE, Robert R. (1897), Mech. Engr., The Variety Iron & Steel Wks. Co., Cleveland, and *for mail*, South Euclid, O.
- McKEE, Arthur Glenn (1907), Cons. and Contr. Engr., 1303 Rockefeller Bldg., and 1654 E. 115th St., Cleveland, O.
- McKEE, Jno. F. (Junior, 1911), Mech. Engr., Genl. Fire Extinguisher Co., and 514 S. Church St., North Charlotte, N. C.
- McKEE, Joseph J. (Associate, 1892), Mgr., C. A. Dunham Co., 5013 Metro. Life Bldg., and The Riviera, 157th St. and Riverside Drive, New York, N. Y.
- McKEE, Neal Trimble (Junior, 1907), Asst. Mech. Engr., Loco. Superheater Co., 30 Church St., and 601 W. 191st St., New York, N. Y.
- McKEE, Robert A. (1908), Mgr. and Ch. Engr. Steam Turbine Dept., Allis-Chalmers Co., and *for mail*, 2311 Grand Ave., Milwaukee, Wis.
- McKEE, Walter Smart (1912), V. P., Edgar Allen Am. Manganeese Steel Co., 1850 McCormick Bldg., and 2142 Lincoln Park West, Chicago, Ill.
- McKEEN, Wm. R., Jr. (1908), Pres. and Genl. Mgr., McKeen Motor Car Co., and 5343 Leavenworth St., Omaha, Neb.
- McKENNAN, Jacob Bowman (Junior, 1899), Mgr. Minnequa Wks., Colo. Fuel & Iron Co., and 2016 Oakland Ave., Pueblo, Colo.
- McKIBBEN, H. B. (Junior, 1910), Constr. Engr., Montrose, Colo.
- McKIEVER, Wm. Henry (1900), Everett Bldg., 45 E. 17th St., New York, and 502 First St., Brooklyn, N. Y.

- McKINNEY, Edward Byron, Sr. (1907), Supt. of Power, New Orleans Ry & Light Co., 205 Baronne St., and *for mail*, 1323 Octavia St., New Orleans, La.
- McKINNEY, Robt. C. (1890), Manager, 1902-1905; Vice-President, 1905-1907; Pres., Niles-Bement-Pond Co., Pratt & Whitney Co., 111 Broadway, New York, N. Y.
- McKINNON, William R. (Junior, 1910), Hyd. Dept., Allis-Chalmers Co., and *for mail*, 5031 National Ave., West Allis, Wis.
- McLAREN, A. R. (1912), Mech. Engr., Otis Elev. Co., N. Point and Beach Sts., and *for mail*, 2377 Filbert St., San Francisco, Cal.
- McLAUTHLIN, Martin B. (1909), Engr. and Treas., Geo. T. McLaithlin Co., 120 Fulton St., Boston, and *for mail*, 65 Rockland Ave., Malden, Mass.
- McLEAN, Robert Walter (Junior, 1907), Carver Cotton Gin Co., East Bridgewater, Mass.
- McLEOD, Adolphus A. (1910), Engr. and Supt., Fla. Phosphate Min. Corp., and *for mail*, Bartow, Fla.
- McMEANS, O. E. (Junior, 1904), Cons. Engr., 710 Majestic Bldg., and *for mail*, 591 Middle Drive, Woodruff Pl., Indianapolis, Ind.
- McMILLAN, Chas. M. (Junior, 1909), Engrg. Dept., The Jahncke Navigation Co., 814 Howard Ave., and *for mail*, 1234 Arabella St., New Orleans, La.
- McMILLIN, Emerson (1895), Life Member; Chairman Bd. of Directors, Am. Light & Traction Co., 40 Wall St., New York N. Y., and *for mail*, "Darlington," Ramsey, N. J.
- McMULLEN, Vincent E. (1907; 1911), Genl. Supt., The Field-Brundage Co., and *for mail*, 155 Maple Ave., Jackson, Mich.
- McMULLIN, Frank V. (1903), Treas., Pa. Forge Co., and 5731 Torresdale Ave., Philadelphia, Pa.
- McMURTRY, Alden Lothrop (1911), Cons. Engr., Sound Beach, Conn.
- McNAIRY, Amos B. (1902), Mfr., Hickox Bldg., Cleveland, O.
- McNAUGHTON, James (1903), V. P., Am. Loco. Co., 30 Church St., and 402 W. 154th St., New York, N. Y.
- McNEIL, Merritt Charles (1912), Salesman, The Westinghouse Mch. Co., and *for mail*, 6716 Thomas Blvd., Pittsburgh, Pa.
- McNEILL, Joseph Hensley (1911), Ch. Inspr. Boston Dept., Hartford Steam Boiler Inspc. & Ins. Co., 101 Milk St., Boston, and *for mail*, Wyoming Heights, Melrose, Mass.
- McSOLEY, Frank Bartlett (Junior, 1912), Service Dept., Narragansett Elec. Ltg. Co., and *for mail*, 585 Cranston St., Providence, R. I.
- McWEENY, Laurence Riley (Junior, 1909), Factory Accountant, Russell, Burdsall & Ward Bolt & Nut Co., and 235 Westchester Ave., Port Chester, N. Y.
- MacARTHUR, Robert, Jr. (Associate, 1904), Supt. M. P., Sargent & Co., and *for mail*, 226 McKinley Ave., New Haven, Conn.
- MacCORQUODALE, Peter H. (1906), Asst. Supt., Church & Dwight Co., 1416 Willis Ave., and *for mail*, 218 Coleridge Ave., Syracuse, N. Y.

- MacFARLAND, Helon Brooks (1907), Engr. of Tests, Atchison, Topeka & Santa Fe Ry. Co., 1537 Ry. Exch., and 5758 Monroe Ave., Chicago, Ill.
- MacGILL, Charles Frederick (1896), Supt., Busch-Sulzer Bros.-Diesel Eng. Co., Second and Utah Sts., and 3852 Hartford St., St. Louis, Mo.; also, St. Paul, Minn.
- MacGREGOR, Wallace F. (Junior, 1901), Supt. Exper. Dept., J. I. Case Threshing Mch. Co., and 422 16th St., Racine, Wis.
- MacGREGOR, Walter (1906), 430 W. Grand Blvd., Detroit, Mich.
- MacKENZIE, Donald (Junior, 1902), Asst. Mgr. Constr. Dept., Swift & Co., Stock Yards, and 6109 Indiana Ave., Chicago, Ill.
- MacLAREN, Malcolm Neill (1899), Nordberg Mfg. Co., 42 Broadway, New York, N. Y.
- MacLAUCHLAN, James H. (1907), J. H. MacLauchlan Engrg. Co., 205 W. Lombard St., Baltimore, Md.
- MacLEOD, Daniel T. (1901; 1907), Asst. Engr., Am. Coke & Gas Constr. Co., Second and Cherry Sts., Camden, and *for mail*, 30 Cedar Ave., Merchantville, N. J.
- MacLEOD, Frank Norman (1912), Sales Engr., Brown & Sharpe Mfg. Co., and *for mail*, 290 Irving Ave., Providence, R. I.
- MacMURRAY, James T. (1904), Genl. Mgr., Niles-Bement-Pond Co., Plainfield, N. J.
- MACBETH, Colin (Associate, 1907), Rosemount, Woldingham, Surrey, England.
- MACDONALD, Duncan H. (1903), 277 Earl St., New Bedford, Mass.
- MACDONALD, George MacIntyre (1912), Ballistic Engrg., Union Metallic Cartridge Co., and *for mail*, The University Club, Bridgeport, Conn.
- MACDONALD, James V. (Junior, 1895), Member of Firm, Ranald H. Macdonald & Co., 29 W. 34th St., and Hotel Berkley, 170 W. 74th St., New York, N. Y.
- MACFARLANE, James (1908), Supt. Dredging, Isthmian Canal Com., Balboa, Canal Zone, C. A.
- MACHOLD, Charles E. (1901), Mech. Engr., Machold & Riddell, Stephen Girard Bldg., Philadelphia, and 17 W. Phil-Ellena St., Germantown, Philadelphia, Pa.
- MACINTIRE, Horace Jas. (Junior, 1907), Instr. Mech. Engrg., Carnegie Inst. of Tech., Pittsburgh, Pa.
- MACK, George J. (Junior, 1909), Insp. of Loco. Boilers, Pub. Service Com., and 30 S. Main Ave., Albany, N. Y.
- MACK, John G. D. (1890), Prof. Mch. Design, College of Engrg., Univ. of Wis., and *for mail*, 110 E. Johnson St., Madison, Wis.
- MACKENZIE, Edmund (1909), Power Constr. Co., and *for mail*, P. O. Box 461, Shelburne Falls, Mass.
- MACKENZIE, William Percival (1907), Treas. and Genl. Mgr., Harrisburg Fdy. & Mch. Wks., and P. O. Box 526; also, 613 N. Front St., Harrisburg, Pa.
- MACKINTOSH, Frederick L. (1912), Asst. Genl. Supt., Winchester Repeating Arms Co., and *for mail*, 82 Admiral St., New Haven, Conn.

- MACLAREN, J. Gayton (1908; 1912), Dist. Engr., The Lamson Co., 15 E. 26th St., New York, and *for mail*, P. O. Box 541, Harrison, N. Y.
- MACON, William Watts (1903; Associate, 1911), Engrg. Editor, The Iron Age, 239 W. 39th St., New York, and 711 Ave. J, Brooklyn, N. Y.
- MADDOCK, George F. (1903), H. M. Byllesby & Co., Stockton, and *for mail*, 2811 College Ave., Berkeley, Cal.
- MADDOCKS, Wm. H. (1891), Asst. Supt. Mchy. and Equip., M., K. & T. Ry., and *for mail*, 2311 W. Crawford Ave., Parsons, Kan.
- MAGEE, John (Junior, 1907), First Natl. Bank Bldg., and 2728 Hampden Court, Chicago, Ill.
- MAGIN, Frank W. (Junior, 1907), Genl. Mgr. and Secy., Independent Elec. Mfg. Co., 299 Third St., Milwaukee, Wis.
- MAGOUN, Henry A. (1890; 1895), V. P., N. Y. Shipbuilding Co., Camden, N. J.
- MAGRATH, Charles Bolton (Junior, 1911), The Lethbridge Iron Wks., Ltd., Lethbridge, Alberta, Canada.
- MAGRUDER, Wm. T. (1884), Prof. Mech. Engrg., Ohio State Univ., and 342 W. 9th Ave., Columbus, O.
- MAGUIRE, Jeremiah De Smet (1911), Pres., Maguire Rubber Co., and Anchor Packing Co., 6 Church St., and Vanderbilt Hotel, New York, N. Y.
- MAGUIRE, M. T. (Associate, 1910), Supt. of Power, Bethlehem Steel Co., and 447 Vine St., South Bethlehem, Pa.
- MAHL, Frederick William (1892; 1910), Asst. to Dir. of Maintenance and Operation, Union Pacific System So. Pacific Co., Rm. 2506, 165 Broadway, New York, and *for mail*, 20 Primrose Ave., Mt. Vernon, N. Y.
- MAHON, Wm. L'E. (1889), Sales Engr., Edgar Allen Am. Manganese Steel Co., New Castle, Del.
- MAIN, Charles T. (1885), Life Member; Engr., Rms. 817-833, 201 Devonshire St., Boston, and 14 Herrick St., Winchester, Mass.
- MAIR-RUMLEY, John Geo. (1892), Life Member; Messrs. Gwynnes, Ltd., Hammersmith Iron Wks., London, W., England.
- MAJOR, C. C. (1902; 1912), Assoc. Prof. Mech. Engrg., Engrg. Hall, Ia. State College, and *for mail*, 512 Douglass Ave., Ames, Ia.
- MALLET, Anatole (Honorary, 1912), 30 Ave. Trudaine, Paris, and 57 Rue de France, Alpes-Maritimes, France.
- MALLORY, Charles K. (1907), Engr. Constr. and Maintenance, The Solvay Process Co., and *for mail*, 1015 James St., Syracuse, N. Y.
- MALOCHEE, Henry J. (1901), Mech. Engr., 802 Perrin Bldg., and *for mail*, 2222 Esplanade Ave., New Orleans, La.
- MALTBY, Geo. Beecher (1904), Genl. Mgr., The Geo. B. Maltby Co., 719-721 St. Clair Ave., N. E., and *for mail*, 1931 E. 101st St., N. E., Cleveland, O.

- MALVERN, Lewis K. (1894; 1903), Mech. Engr., Elgin Natl. Watch Co., and *for mail*, Box 64, Elgin, Ill.
- MANLEY, Sumner M. (Junior, 1907), Asst. Mech. Engr., The Proctor & Gamble Co., Ivorydale, and *for mail*, Ivy St., Glendale, O.
- MANN, A. S. (1900), Mech. Engr., Genl. Elec. Co., Schenectady, N. Y.
- MANN, Harvey Blaine (Junior, 1911), 717 Finance Bldg., Kansas City, Mo.
- MANNING, Chas. Henry (1884), Manager, 1893-1895; Vice-President, 1895-1897; Life Member; Ch. Engr., U. S. N., Ret., Genl. Supt., Amoskeag Mfg. Co., and 1838 N. Elm St., Manchester, N. H.
- MANSFIELD, Albert K. (1887), Cons. Engr., 283 Lincoln Ave., Salem, O.
- MANTON, Arthur Woodroffe (1908), Civ. and Mech. Engr., 10 Victoria St., Westminster, London, and Ellerbourn, Woodbourne Rd., Edgbaston, Birmingham, England.
- MARBLE, Ernest G. (1909), Genl. Sales and Wks. Mgr., Am. Engrg. Co., Philadelphia, and 52 E. Sedgwick St., Germantown, Philadelphia, Pa.
- MARBLE, Harry Mills (Junior, 1893), Solicitor of Patents, 141 Broadway, New York, N. Y., and 625 Ridge St., Newark, N. J.
- MARBURG, Louis C. (1909), Secy. and Treas., Marburg Bros., Inc., U. S. Rubber Bldg., 1790 Broadway, New York, N. Y.
- MARKEY, Harry Shaffer (1912), Ch. Engr., City Elec. Co., 230 Beach St., San Francisco, Cal.
- MARKHAM, Edward R. (1903), Instr. Mech. Engrg., Harvard Univ. and Rindge Tech. Sch., and 8 Ellsworth Ave., Cambridge, Mass.
- MARKS, Harry J. (1907), Mech. Engr., 90 West St., New York, and *for mail*, 86 Palmer Ave., Mamaroneck, N. Y.
- MARKS, Lionel S. (1897; 1904), Prof. Mech. Engrg., Harvard Univ., and *for mail*, 192 Brattle St., Cambridge, Mass.
- MAROT, Edward H. (Junior, 1903), Sales Engr., Hyatt Roller Bearing Co., Newark, N. J., and *for mail*, 38 Pastorius St., Germantown, Philadelphia, Pa.
- MARQUINA, Louis G. (1906), Engr., The Peruvian Corp., Ltd., and 520 Plaza Bolognesi, Lima, Peru, S. A.
- MARQUIS, Franklin Wales (Junior, 1908), Assoc. in Ry. Engrg., Engrg. Exper. Sta., Univ. of Ill., Urbana, and 501 W. High St., Champaign, Ill.
- MARR, Geo. H. (1891; 1905), Mech. Engr., Hollingsworth & Whitney Co., and *for mail*, 94 Silver St., Waterville, Me.
- MARSH, Thomas Alfred (1905; 1912), Mech. Engr., Green Engrg. Co., 28 E. Jackson St., and *for mail*, 6647 Monroe Ave., Chicago, Ill.
- MARSHALL, Ernest Woods (1904), Pat. Lawyer, 76 William St., New York, and 1195 Warburton Ave., Yonkers, N. Y.
- MARSHALL, Norman (1910), Cons. Engr., 107 Chestnut St., West Newton, Mass.

- MARSHALL, Stewart McCulloch (1907; 1910), Ch. Engr., Cambria Steel Co., and *for mail*, 134 Tioga St., Johnstown, Pa.
- MARSHALL, Waldo H. (1893), Pres., Am. Loco. Co., 30 Church St., and The Langham, 135 Central Park W., New York, N. Y.
- MARSHALL, Wm. Crosby (1901; 1909), Asst. Prof. Mch. Design, S. S. S., Yale Univ., 114 Winchester Hall, and *for mail*, 137 Wall St., New Haven, Conn.
- MARTELL, Louis H. (1906), Specialist in Metal Packings, Elyria, O.
- MARTENS, Ferdinand (1885), care of John G. Embree, College Point, L. I., N. Y.
- MARTIN, Edward J. (Junior, 1907), Asst. Supt. and Mgr. of Production, Hopkins & Allen Arms Co., and *for mail*, 57 Cliff St., Norwich, Conn.
- MARTIN, Frank M. (1912), Asst. Wks. Supt., The Celluloid Co., 290 Ferry St., and 29 Homestead Park, Newark, N. J.
- MARTIN, Frederick Sheldon (1905), Supt. Industrial Motor Dept., Westinghouse Elec. & Mfg. Co., East Pittsburgh, and *for mail*, 309 Hutchinson St., Swissvale Sta., Pittsburgh, Pa.
- MARTIN, George W. (1911), V. P. and Genl. Mgr., The N. Y. Service Co., 320 Broadway, New York, N. Y.
- MARTIN, Haakon A. (Associate, 1908), Head Invention, 5, Natl. Cash Register Co., Dayton, O.
- MARTIN, Louis Adolph, Jr. (1912), Prof. Mechanics and Dean of Junior Class, Stevens Inst. of Tech., and *for mail*, 911 Castle Point Terrace, Hoboken, N. J.
- MARTIN, Mack (1908), Dept. Mech. Engrg., Wash. State College, and *for mail*, 121 South St., Pullman, Wash.
- MARTIN, Simon Strock (1903), Supt., Md. Steel Co., P. O. Box 87, and 520 B St., Sparrows Point, Md.
- MARTINTO, Pedro (Associate, 1901), Apartado 146, Lima, Peru, S. A.
- MARTUS, Martin Lorenz (1912), Mech. Engr., Asst. Mgr. and Secy., The Waterbury Battery Co., and *for mail*, 1056 S. Main St., Waterbury, Conn.
- MARX, August (Junior, 1907), Salesman, The G. A. Gray Co., Gest and Depot Sts., Cincinnati, O.
- MARX, Guido Hugo (1901), Prof. Mch. Design, Leland Stanford Jr. Univ., Stanford University P. O., and 356 Lincoln Ave., Palo Alto, Cal.
- MARX, Henry (1880; 1892), Pres., The G. A. Gray Co., Gest and Depot Sts., Cincinnati, and 684 S. Crescent Ave., Avondale, Cincinnati, O.
- MARZOLI, Luigi (Junior, 1908), Genl. Mgr. and Supt., Fratelli Marzoli & Cie., Palazzola s/Oglio, Prov. of Brescia, Italy.
- MASON, Daniel A. (1899; 1902), Supt., N. Y. Tribune Bldg., 154 Nassau St., New York, and *for mail*, 372 Stuyvesant Ave., Brooklyn, N. Y.
- MASON, Frederick H. (Associate, 1901), Feed Water Purification, Htg., Power Plant Spec., Brick and Concrete Chimney Constr., 614 Moffat Bldg., and 53 Seward Ave., Detroit, Mich.

- MASON, William (1880), 78 Burncoat St., Worcester, Mass.
- MASON, William H. (Junior, 1901), Supt., Edison Portland Cement Co., Stewartsville, N. J.
- MASSA, Robt. F. (1904), H. W. Johns-Manville Co., 41st St. and Madison Ave., New York, N. Y.
- MASSEY, Geo. Bragg, 2d (Junior, 1898), Bucyrus Co., South Milwaukee, Wis.
- MASURY, Alfred Fellows (Junior, 1904), Factory Mgr., Hewitt Motor Co., 102 West End Ave., New York, N. Y.
- MATCHETT, James C. (Junior, 1912), Sales Engr., Ill. Engrg. Co., 1205 Monadnock Bldg., and 6940 Wentworth Ave., Chicago, Ill.
- MATHESON, Wm. G. (1891), Mgr., I. Matheson & Co., Ltd., New Glasgow, N. S., Canada.
- MATHEWS, William Edwin (1895), Supvr., Inspc. and Tests, Norwalk Iron Wks. Co., and 40 West St., South Norwalk, Conn.
- MATLACK, Ellwood V. (1904), 415 Bompert Rd., Webster Groves, Mo.
- MATTES, Wm. F. (1882), Life Member; Ret., 1529 Sanderson Ave., Scranton, Pa.
- MATTHEWS, Fred Elwood (1904; 1911), Sales Engr., H. W. Johns-Manville Co., 41st St. and Madison Ave., New York, N. Y., and Leonia Ave., Leonia, N. J.
- MATTHEWS, John G. (1897; 1907), Instr. Mech. Drawing, East Tech. H. S., Cleveland, and *for mail*, 17 Beech St., Berea, O.
- MATTICE, Asa M. (1889), Manager, 1903-1906; R. F. D. 5, Box 4, Lockport, N. Y.
- MATTON, Fred. V. (1892), Mech. Engr., Camden Iron Wks., Camden, N. J.
- MATTSSON, A. Geo. (1892), Ch. Engr., Great Lakes Engrg. Wks., and *for mail*, 199 Palmer Ave., E., Detroit, Mich.
- MATTY, Leo. J. (Junior, 1907), Pat. Lawyer, 141 Broadway, New York, N. Y.
- MAUGER, David Napier (Junior, 1911), Babcock & Wilcox Co., Bayonne, and *for mail*, 23 Laramie Rd., Plainfield, N. J.
- MAURY, Dabney Herndon (1890), Cons. Engr., 1137-1138 Monadnock Blk., Chicago, Ill.
- MAW, Arthur Ernest (Junior, 1911), 18 Addison Rd., Kensington, W., London, England.
- MAXFIELD, Howard H. (1904), M. M., Pa. R. R. Co., 28th St., Pittsburgh, Pa.
- MAXWELL, Max Carson (1908), Head of Dept. of Applied Mechanics, Pratt Inst., and 1020 E. 13th St., Brooklyn; also, Cons. Engr., Woolworth Bldg., New York, N. Y.
- MAY, De Courcy (1881), Manager, 1900-1903; Chairman, N. Y. Shipbuilding Co., Camden, N. J.
- MAY, Edwin Augustus (1912), Asst. Mgr. Boiler Dept., Am. Radiator Co., and *for mail*, 816 S. Michigan Ave., Chicago, Ill.
- MAYALL, E. L. (1909), 1003 Second Ave., Rock Island, Ill.

- MAYHEW**, Ray (Associate, 1910), Mech. Engr. in Charge Mech. Dept., Minneapolis Steel & Mchy. Co., 2854 Minnehaha Ave., and *for mail*, 4454 36th Ave., S., Minneapolis, Minn.
- MAYO**, John B. (1892; 1894), Checker Drafting Dept., New London Ship & Eng. Co., and *for mail*, Lock Box 243, Groton, Conn.
- MAYO**, Wm. Benson (1900), Secy. and Genl. Mgr., The Hooven, Owens, Rentschler Co., Hamilton, O.
- MAYSILLES**, John Henry (1901; 1910), Asst. Supt., Geo. D. Whitcomb Co., and *for mail*, 1204 Third Ave., Rochelle, Ill.
- MAYTHAM**, Walter John (1905), Ch. Engr., Cowham Engrg. Co., Carter Bldg., and 761 W. Main St., Jackson, Mich.
- MAZZUR**, Frank Amedee (1910), N. E. Mgr., Wheeler Condenser & Engrg. Co., 141 Milk St., Boston, and Glen Rd., Wellesley Farms, Mass.
- MEAD**, Daniel W. (1908), Prof. Hyd. and Sanitary Engrg., Univ. of Wis., Cons. Engr., 530 State St., and *for mail*, 1015 University Ave., Madison, Wis.
- MEADE**, Richard Kidder (1912), Chem. Engr., Cons. Practice, 202 N. Calvert St., Baltimore, and *for mail*, Roland Park, Baltimore Co., Md.
- MEAKER**, Guy Larnard (Junior, 1904), Am. Steel & Wire Co., Rockdale Wks., and *for mail*, 308 N. Ottawa St., Joliet, Ill.
- MEES**, Curtis A. (Associate, 1908), Designing Engr., So. Power Co., Charlotte, N. C.
- MEGIRIAN**, Joseph J. (Junior, 1912), Mech. Engr., 209 72d St., Brooklyn, N. Y.
- MEHARG**, Laurence (Junior, 1912), Estimator, Allis-Chalmers Co., West Allis, and *for mail*, 412 National Ave., Milwaukee, Wis.
- MEIER**, E. D. (1891), Manager, 1895-1898; Vice-President, 1898-1900, 1909-1910; President, 1911; Pres. and Ch. Engr., Heine Safety Boiler Co., 11 Broadway, New York, N. Y.
- MEIER**, Konrad (1904), Htg. and Ventilating Engr., 12 Tachlisbrunnen St., Winterthur, Switzerland.
- MEINHOLTZ**, Herman Chas. (1909), V. P. and Supt., Heine Safety Boiler Co., 2449 E. Marcus Ave., and *for mail*, 4812 Greer Ave., St. Louis, Mo.
- MEISEL**, Otto C. F. (Junior, 1912), 10 Upland Ave., Dorchester, Mass.
- MELCHER**, Charles W. (1890), Secy. and Genl. Mgr., Ingersoll-Rand Co. of Ill., 1507 Peoples Gas Bldg., Chicago, and *for mail*, 189 Walnut St., Hinsdale, Ill.
- MELLEN**, Edwin D. (1890), Central Sq., and *for mail*, 1590 Massachusetts Ave., Cambridge, Mass.
- MELLIN**, Carl J. (1890), Cons. Engr., Am. Loco. Co., and *for mail*, 1005 Union St., Schenectady, N. Y.
- MELLOR**, Hiram L. (1908), Pres. and Mgr., Lawrence Pump & Eng. Co., and *for mail*, P. O. Box 70, Lawrence, Mass.
- MELVIN**, David N. (1880), Life Member; Supt. and Engr., Am. Linoleum Mfg. Co., Linoleumville, S. I., N. Y.

- MERRELL, Irving Seaward (1910), V. P. and Mech. Engr., Merrell-Soule Co., and *for mail*, 524 W. Onondaga St., Syracuse, N. Y.
- MERRIAM, Henry P. (1887; 1896), 243 Waverly Pl., New York, N. Y.
- MERRILL, Albert S. (Junior, 1903), Turner Constr. Co., 11 Broadway, and *for mail*, 17 Gramercy Park, New York, N. Y.
- MERRILL, Frank A. (Associate, 1902), Mgr., The Merrill Co., 19 Pearl St., Boston, and *for mail*, 620 Main St., Malden, Mass.
- MERRILL, Geo. H. (Junior, 1898), Secy., Merrill Bros., Maspeth, and 469 Greene Ave., Brooklyn, N. Y.
- MERRILL, J. J. (1911), Ch. Engr., Corn Products Refining Co., 217 E. Illinois St., and 229 S. Central Park Ave., Chicago, Ill.
- MERRITT, Arthur A. (1907), Mech. Engr., Brown & Sharpe Mfg. Co., Providence, R. I., and 28 Holden St., Worcester, Mass.
- MERRITT, Joseph (1907), Cons. and Constr. Mech. Engr., 60 Prospect St., and 64 Deerfield Ave., Hartford, Conn.
- MERRYWEATHER, Geo. Edmund (1903), Pres., Motch & Merryweather Mch. Co., 707-715 Lakeside Ave., N. W., and 11,326 Hessler Rd., Cleveland, O.
- MERSEREAU, Theodore T. (1905), Mech. Engr., 80 Broad St., New York, and *for mail*, 448 56th St., Brooklyn, N. Y.
- MERSHON, Ralph D. (1900), Cons. Elec. and Mech. Engr., 80 Maiden Lane, and *for mail*, 65 W. 54th St., New York, N. Y.
- MERZ, Robert G. (Junior, 1907), Mech. Engr. and Ch. Draftsman, Am. Process Co., 68 William St., New York, N. Y., and *for mail*, 57 Ninth Ave., Newark, N. J.
- MESICK, D. W. (1892), Prop. and Mgr., Fulton Fdy. & Mch. Co., 25 Furman St., and *for mail*, 108 Hicks St., Brooklyn, N. Y.
- MESKER, Louis Henry (1912), Ferro Mch. & Fdy. Co., and 8104 Hough Ave., Cleveland, O.
- MESTA, George (1894), Pres., Mesta Mch. Co., Oliver Bldg., Pittsburgh, and West Homestead, Pa.
- METCALF, F. M. (1907), Mech. Engr., Am. Steam Pump Co., and *for mail*, 99 Fremont St., Battle Creek, Mich.
- METCALF, Frank Hamilton (1910), Asst. Genl. Mgr., Farr Alpaca Co., and 387 Appleton St., Holyoke, Mass.
- METCALF, Leonard (1904), Cons. Civ. Engr., Metcalf & Eddy, 14 Beacon St., Boston, and Concord, Mass.
- METZ, Walter R. (1902; 1911), Supt. of Bldgs., Govt. Ptg. Office, and 717 Massachusetts Ave., N. E., Washington, D. C.
- MEYER, C. Louis (Junior, 1909), Mgr., Concrete Engrg. Co., Omaha Natl. Bank Bldg., and *for mail*, 210 S. 36th St., Omaha, Neb.
- MEYER, Erwin Charles (Junior, 1911), Engr., Parish Mfg. Co., 1666 Mt. Elliott Ave., Detroit, Mich., and 563 W. 183d St., New York, N. Y.
- MEYER, Henry Coddington, Jr. (1894; 1903), Cons. Mech. Engr., Metro. Bldg., 1 Madison Ave., New York, N. Y., and Montclair, N. J.

- MICHEL, A. Eugene (1906; Associate, 1908), Adv. Engr., Woolworth Bldg., 233 Broadway, New York, N. Y.
- MICHEL, Frederik Adolf (Junior, 1912), Checker and Charge of Squad, Milwaukee Bridge Co., and *for mail*, 114 Tenth St., Milwaukee, Wis.
- MIDDLETON, Albert C. (Associate, 1911), Secy., Victor Talking Mch. Co., Camden, and *for mail*, 149 E. Main St., Moorestown, N. J.
- MIDDLETON, Harvey (1886), Pres., Thos. C. Basshor Co., 28 Light St., Baltimore, and 12 Overhill Rd., Roland Park, Md.
- MIDDLETON, Percy Howe (1894; 1901), Engr. and V. P., The Crandall Eng. Co., 102 Border St., East Boston, Mass.
- MIDGLEY, Frederick W. (Junior, 1904), Ch. Draftsman Eng. Dept., Otis Elev. Co., New York, and *for mail*, 23 Florence St., Yonkers, N. Y.
- MIGGETT, William Lincoln (1901), Prof. of Shop Practice and Supt., Engrg. Shops, Univ. of Mich., and 1102 Willard St., Ann Arbor, Mich.
- MILES, Henry Dixon (1907), Pres., Buffalo Fdy. & Mch. Co., and 139 Bryant St., Buffalo, N. Y.
- MILKER, Herbert P. (Associate, 1912), Publicity Dir. and Acting Sales Mgr., C. J. Tagliabue Mfg. Co., 32 33d St., Brooklyn, N. Y.
- MILLER, Edward Furber (1888; 1891), Prof. Steam Engrg., Mass. Inst. of Tech., Boston, and 538 Ward St., Newton Centre, Mass.
- MILLER, Edwin Ellsworth (1912), Asst. Supt. of Power Plants, Hackensack Water Co., Weehawken, and Edgewood Lane, Palisade, N. J.
- MILLER, F. Joseph (Junior, 1905), Asst. Engr., Warren Webster & Co., Camden, N. J., and *for mail*, 1312 Bristol St., Philadelphia, Pa.
- MILLER, Fred J. (1890), Factory Mgr., Union Typewriter Co., 293 Broadway, and Engrs.' Club, 32 W. 40th St., New York, N. Y.
- MILLER, Frank Louis (Associate, 1907), Ch. Engr., Parkersburg Mch. Co., Parkersburg, W. Va.
- MILLER, George H. (1906), Supvg. Engr., Cheney Bros., and 23 E. Center St., South Manchester, Conn.
- MILLER, Herman G. (1908), Mech. and Refrigerating Engr., Armstrong Mchy. Co., and 3257 E. 14th Ave., Spokane, Wash.
- MILLER, John Fisher Garr (1910), Engrg. Salesman and Mgr. St. Louis Office, Am. Blower Co., Title Guaranty Bldg., and 230 N. Boyle Ave., St. Louis, Mo.
- MILLER, John S. (1900; 1907), Yuba Constr. Co., and 604 H St., Marysville, Cal.
- MILLER, Lebbeus B. (1883), Manager, 1893-1896; 1025 E. Jersey St., Elizabeth, N. J.
- MILLER, Spencer (1888), Lidgerwood Mfg. Co., 96 Liberty St., New York, N. Y., and 217 Turrell Ave., South Orange, N. J.

- MILLER, Theodore Harry (1906), Supt., De Laval Separator Co., and *for mail*, 40 S. Clinton St., Poughkeepsie, N. Y.
- MILLER, Thomas Harrison (Junior, 1905), Ch. Draftsman, Semet-Solvay Co., and *for mail*, Solvay Club House, Syracuse, N. Y.
- MILLER, Walter (1886), 24 Rosemont Rd., East Cleveland, O.
- MILLETT, Kenneth Ballard (Junior, 1908), Local Engr., Willimantic Mills of The Am. Thread Co., and *for mail*, Fairview St., Willimantic, Conn.
- MILLHOLLAND, William Knox (1907), Pres., W. K. Millholland Mch. Co., Industrial Bldg., 10th and Canal Sts., and *for mail*, 2857 N. Capitol Ave., Indianapolis, Ind.
- MILLS, Charles (1907), Cons. Engr., Saco-Lowell Shops, and *for mail*, 23 High St., Newton Upper Falls, Mass.
- MILLS, Chester B. (1912), Mech. Engr. in Charge of Drafting Room, Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa.
- MILLS, Edmund (1903), Marine Dept., Babcock & Wilcox Co., 85 Liberty St., New York, N. Y., and *for mail*, 319 Arlington Ave., Jersey City, N. J.
- MILLSPAUGH, William H. (Associate, 1903), Pres., Sandusky Fdy. and Mch. Co., Sandusky, O.
- MILNE, James (1907), Cons. Engr., City Hall, Toronto, Ont., Canada.
- MILNER, Bert Branson (Junior, 1911), Pa. R. R. Co., Wilmington, Del.
- MILSON, Thomas H. (1903), 528 E. 29th St., Paterson, N. J.
- MINCK, Peter (Junior, 1909), Asst. to Sales Mgr., N. Y. Office, Kilbourne & Jacobs Mfg. Co., 25 Broad St., New York, N. Y., and *for mail*, 112 Gardner St., Union Hill, N. J.
- MIRKIL, Thomas H., Jr. (1884), V. P. and Genl. Mgr., Poole Engrg. & Mch. Co., Woodberry, and The Severn Apts., Baltimore, Md.
- MITCHELL, Albert E. (1891), V. P., Wyckoff Pipe & Creosoting Co., Inc., 50 Church St., New York, N. Y., and Strawberry Hill Ave., Stamford, Conn.
- MITCHELL, Benjamin M. (1894; 1905), Pres., Conveying Weigher Co., Engr. of Tests, N. Y. Lubricating Oil Co., New York, N. Y., and Mech. Engr., Manhattan Rubber Mfg. Co., and *for mail*, 244 Lafayette Ave., Passaic, N. J.
- MITCHELL, Chas. J. (1908), Ch. Draftsman, Fairbanks-Morse Mfg. Co., and *for mail*, 825 Park Ave., Beloit, Wis.
- MITCHELL, Guy Edward (1903), Hampden R. R. Corp., Westfield, Mass.
- MITCHELL, John Hennon (Associate, 1900), Mgr. of Sales, West. Dist., Pressed Steel Car Co., West. Steel Car & Fdy. Co., 1470 Old Colony Bldg., Chicago, and *for mail*, 1031 Judson Ave., Evanston, Ill.
- MITCHELL, Samuel Edward (1912), Genl. Supt., Geo. D. Pohl Mfg. Co., Vernon, N. Y.
- MITCHELL, William Clark (1901), Engr., Nottingham, O.
- MIX, Melville W. (1893), Pres. and Mgr., Dodge Mfg. Co., Mishawaka, Ind.

- MIXTER, George W. (1899; 1908), V. P., Deere & Co., Moline, Ill.
- MIZUNO, Seichi (Associate, 1912), Engr. Ry. and Elec. Mchy. Depts., Mitsui & Co., Ltd., 445 Broome St., and *for mail*, 606 W. 113th St., New York, N. Y.
- MOELLER, Franklin (1891; 1912), Mech. Engr. Power and Min. Dept., Wellman-Seaver-Morgan Co., Cleveland, and *for mail*, 42 Chapman Ave., East Cleveland, O.
- MOHR, Louis (1886), Secy. and Cons. Engr., John Mohr & Sons, 349 W. Illinois St., and 1520 N. Robey St., Chicago, Ill.
- MOLDENKE, Richard (1900), Secy., Am. Foundrymen's Asso., Watchung, N. J.
- MOLÉ, Harvey E. (1901), 55 Liberty St., New York, N. Y., and 14 Mountain Ave., Summit, N. J.
- MONAGHAN, James F. (1909), Cons. Engr., Mech. Engr., The Waltham Bleachery & Dye Wks., and *for mail*, 208 Newton St.; also, 2 Oak St., Waltham, Mass.
- MONAGHAN, Wm. Franchère (1886), Life Member; Engrg. Dept., N. Y. Edison Co., 55 Duane St., New York, N. Y.
- MONAHAN, Louis J. (1912), V. P. and Mech. Engr., Termaat & Monahan Co., and *for mail*, 57 Waugoo St., Oshkosh, Wis.
- MONKS, Archibald G. (Associate, 1908), Partner, Monks & Johnson, 7 Water St., Boston, and Brookline, Mass.
- MONKS, Wm. Douglas (Junior, 1908), Asst. Ch. Engr. Refrig. Mch. Dept., De La Vergne Mch. Co., foot of E. 138th St., New York, and *for mail*, 353 S. 3d Ave., Mt. Vernon, N. Y.
- MONNOT, John Ferreol (1909), Cons. Engr., Duplex Metals Co., V. P., Hudson Wire Co., and *for mail*, 31, Rue Daru, Paris, France.
- MONROE, Wm. S. (1896; 1901), Mech. Engr., Sargent & Lundy, 1720 Ry. Exch. Bldg., and 64 E. Elm St., Chicago, Ill.
- MONTAGUE, Chas. Dwight (1905), Mech. Engr. with George H. Church, 55 Wall St., New York, N. Y.
- MONTEAGLE, Robt. Chas. (1904), Asst. Mgr. and Engr., The Lockwood Mfg. Co., East Boston, and *for mail*, 283 Highland Ave., West Newton, Mass.
- MONTGOMERY, H. M. (1889), Dist. Mgr., Alberger Pump & Condenser Co., 137 S. LaSalle St., Chicago, and *for mail*, 1221 Davis St., Evanston, Ill.
- MOODY, Herbert A. (1901; 1905; 1910), Cons. Industrial Engr., 178 Devonshire St., Boston, Mass.
- MOODY, Lewis F. (1910), Prof. Hydraulics, Rensselaer Poly. Inst., and Cons. Engr., Hyd. Dept., I. P. Morris Co. of Philadelphia, Pa., and *for mail*, 7 Hawthorne Ave., Troy, N. Y.
- MOODY, William O. (1907), Mech. Engr., Ill. Central R. R., and *for mail*, 4453 Lake Ave., Chicago, Ill.
- MOON, Hartley Allen (Associate, 1908), Charge of Drafting and Test Depts., Continental Gin Co., and 1703 14th Ave., S., Birmingham, Ala.
- MOONEY, Franklin Proctor (Junior, 1911), Ch. Electrician, The Arrowhead Reservoir & Power Co., San Bernardino, Cal.

- MOORE, Albert B. (1903), Treas. and Genl. Mgr., Shedd Elec. Co., Inc., and *for mail*, 138 Third Ave., E., Roselle, N. J.
- MOORE, Allen H. (1902), Genl. Elec. Co., Schenectady, and *for mail*, 579 Western Ave., Albany, N. Y.
- MOORE, Charles A. (Associate, 1880), Pres., Manning, Maxwell & Moore, Inc., 85-89 Liberty St., and P. O. Box 1400, New York, N. Y.
- MOORE, Edwin A. (1908), Pres., Am. Coke & Gas Constr. Co., P. O. Box 351, Second and Cherry Sts., Camden, N. J., and 2216 N. 52d St., Wynnefield Ave., Philadelphia, Pa.
- MOORE, Fredk. Clouston (1905), 124 Connecticut Ave., Detroit, Mich.
- MOORE, Harold T. (Associate, 1907), Industrial Engr., Day & Zimmermann, 608 Chestnut St., and *for mail*, 2031 Spruce St., Philadelphia, Pa.
- MOORE, James Leonard (1911), Ch. Engr., Kerr Turbine Co., Wellsville, N. Y.
- MOORE, Lee C. (1902), Cons. Mech. Engr., Lee C. Moore & Co., 341 Sixth Ave., and *for mail*, 1815 Morrell St., N. S., Pittsburgh, Pa.
- MOORE, Levin A. (1912), Ch. Engr., Roessler & Hasslacher Chem. Co., and 125 Kearny Ave., Perth Amboy, N. J.
- MOORE, Miller F. (1891), 145 E. 4th Ave., Roselle, N. J.
- MOORE, R. S. (1892), Manager, 1901-1904; Life Member; Treas., Moore & Scott Iron Wks., San Francisco, Cal.
- MOORE, Samuel L. (1907), V. P. and Genl. Mgr., The Moore Bros. Co., and *for mail*, 205 Stiles St., Elizabeth, N. J.
- MOORE, Stanley H. (1900; Associate, 1903), Arch. and Engr., Forest and Selma Ave., Webster Groves, Mo.
- MOORE, Wm. Enoch (1903), Mgr., West. Pa. Ry. & Ltg. Properties, and Cons. Engr., Am. Water Wks. & Guarantee Co., 603 Bank for Savings Bldg., Pittsburgh, Pa.
- MOORE, William James Perry (1885; 1888), Alberger Pump & Condenser Co., 140 Cedar St., and *for mail*, 629 W. 115th St., New York, N. Y.
- MORAN, Daniel E. (1886; 1904), Cons. Engr., 55 Liberty St., New York, N. Y., and Mendham, Morris Co., N. J.
- MORAT, Jacques (1909), Spuyten Duyvil, and 314 Riverdale Ave., Yonkers, N. Y.
- MORAVA, Wensel (1886), Pres., Morava Constr. Co., and *for mail*, 4846 Kenwood Ave., Chicago, Ill.
- MOREHEAD, George Lawrence (1912), Supt. of Constr., Link-Belt Co., and *for mail*, 7116 Princeton Ave., Chicago, Ill.
- MORETON, George Wm. (1909), Genl. Supt., Betts Mch. Co., and 1323 Gilpin Ave., Wilmington, Del.
- MORFORD, Thomas E. (1902), Mgr. N. Y. Office, Am. Steam Pump Co., 17 Battery Pl., New York, N. Y.
- MORGAN, David Bradley (1912), Wks. Mgr., David Bradley Mfg. Co., Bradley, Ill.

- MORGAN, John T. (Junior, 1912), Supply and Mchy. Salesman, Charleston Elec. Supply Co., Charleston, and *for mail*, Box 264, Bluefield, W. Va.
- MORGAN, Joseph (1881), Vice-President, 1886-1888; Cons. Engr., Cambria Steel Co., Johnstown, and *for mail*, 408 Tioga St., Westmont, Johnstown, Pa.
- MORGAN, Lewis Henry (1904; 1906), Whitewell, Nantwich, Cheshire, England.
- MORGAN, Paul B. (1891; 1900), Treas., Morgan Constr. Co., 21 Lincoln St., and 21 Cedar St., Worcester, Mass.
- MORGAN, Ralph Landers (1900; 1902), Cons. Engr., 452 Main St., and 96 William St., Worcester, Mass.
- MORGAN, Robert C. (1911), Engr., Stewart A. Jellett, Franklin Bank Bldg., Philadelphia, and *for mail*, 314 W. Seymour St., Philadelphia, Pa.
- MORGAN, William F. (Associate, 1906), N. E. Agt., Am. Mfg. Co., Beacon and Joy Sts., Boston, Mass.
- MORITZ, Albert (1905), Comdr., U. S. Navy, Ret., 723 E. 18th St., Brooklyn, N. Y.
- MORRIN, Thos. (1897), Cons. Mech. Engr., Balboa Bldg., and 1353 Jackson St., San Francisco, Cal.
- MORRIS, Henry G. (1882), Vice-President, 1887-1889; Commonwealth Bldg., 12th and Chestnut Sts., and Cons. Engr., Cresson Morris Co., 18th St. and Allegheny Ave., Philadelphia, Pa.
- MORRIS, Thomas Bray (Junior, 1910), Mech. Engr., E. K. Morris & Co., and *for mail*, 2846 Harrison Ave., Cincinnati, O.
- MORRIS, Wm. S. (1897), Spec. Agt., C. & O. R. R., Richmond, Va., and *for mail*, 813 W. Berry St., Fort Wayne, Ind.
- MORRISON, Clarke J. (1909), Mgr. Engrg. Dept., Suffern & Son, 149 Broadway, New York, N. Y., and *for mail*, 191 N. Walnut St., East Orange, N. J.
- MORRISON, Egbert R. (Junior, 1906), Asst. Mgr., Sharon Boiler Wks., Genl. Sales Agt., Morrison Water Tube Boilers, and *for mail*, 15 S. Oakland Ave., Sharon, Pa.
- MORRISON, Herbert H. (1898; 1904), Mech. Engr., 204 Bd. of Ed. Bldg., St. Louis, Mo.
- MORRISON, Hunter (Junior, 1903), Sales Mgr., Hill Clutch Co., and 1801 E. 89th St., Cleveland, O.
- MORRISON, William (Junior, 1900), Sales Mgr., Highland Body Co., Elmwood Pl., Cincinnati, and *for mail*, 750 Ludlow Ave., Clifton, Cincinnati, O.
- MORSE, Arthur Holmes (1911), Mech. Engr. and Asst. Supt., The Baldwin Co., and *for mail*, 2202 Highland Ave., Cincinnati, O.
- MORSE, Chas. H., Jr. (1897; 1904), Pres., Fairbanks-Morse Mfg. Co., 900 S. Wabash Ave., and *for mail*, 1132 E. 49th St., Chicago, Ill.
- MORSE, Chas. M. (1884), Cons. Mech. Engr., 2 Rector St., New York, and Buffalo, N. Y.
- MORSE, Everett Fleet (1901), Morse Thermo Gage Co., 208 E. State St., and 111 Eddy St., Ithaca, N. Y.

- MORSE, Frank Lincoln (1912), Treas. and Mgr., Morse Chain Co., and 514 Edgewood Pl., Ithaca, N. Y.
- MORSE, William A. (1903), Wks. Mech. Engr., Otis Elev. Co., Wells and Woodworth Ave., and *for mail*, 21 Union Pl., Yonkers, N. Y.
- MORSE, William Horace (1901; 1903), Asst. V. P., A. Garrison Fdy. Co., Pittsburgh, Pa.
- MORTENSEN, Caspar (Junior, 1899), Designer Mch. Tool Dept., Genl. Elec. Co., and *for mail*, 220 Broadway, Schenectady, N. Y.
- MORTON, Geo. L. (1890), Prin. Examiner, Instruments of Precision, 264, U. S. Pat. Office, and *for mail*, Flat 503, The Ontario, Washington, D. C.
- MOSELEY, Alexander Willett (1900), Prof. Mechanics, Head Dept. Engrg., Lewis Inst., Chicago, and Evanston, Ill.
- MOSHER, William Earl (Junior, 1912), Research Fellow in Mech. Engrg., Engrg. Exper. Sta., Univ. of Ill., Urbana, and *for mail*, 311 E. Healey St., Champaign, Ill.
- MOSMAN, Chas. Tyler (1909), Dist. Engr., Genl. Elec. Co., 84 State St., Boston, and Winchester, Mass.
- MOSS, Sanford A. (1903), Engr. Turbine Research Dept., Genl. Elec. Co., West Lynn, and 36 Sachem St., Lynn, Mass.
- MOSSBERG, Frank (1895), Pres. and Genl. Mgr., Frank Mossberg Co., also V. P. and Cons. Engr., Stand. Mch. Co. of Providence, R. I., and *for mail*, 141 Pleasant St., Attleboro, Mass.
- MOTT, Abram Cox, Jr. (Junior, 1907), First V. P. and Genl. Mgr., Abram Cox Stove Co., American and Dauphin Sts., Philadelphia, and "The Woods," Box 71, Lansdale, Pa.
- MOTT, Chas. Stewart (1898; 1909), Pres., Weston Mott Co., Flint, Mich.
- MOULTROP, Irving E. (1902), Manager, 1908-1911; Vice-President, 1912-1914; Mech. Engr., Edison Elec. Ill. Co. of Boston, and *for mail*, 39 Boylston St., Boston; also, 75 Winchester St., Brookline, Mass.
- MOUNT, Carroll Hays (Junior, 1910), Salesman, Keystone Lubricating Co., Philadelphia, Pa., and *for mail*, 195 W. 11th Ave., Columbus, O.
- MOUNT, Wm. Dye (1892; 1897), Genl. Supt., Mathieson Alkali Wks., Saltville, Va.
- MOWERY, John N. (1906), Mech. Engr., Keystone Lubricating Co., 21st and Clearfield Sts., Philadelphia, Pa.
- MOXHAM, Egbert (1906; 1912), Asst. Mgr. Development Dept., E. I. du Pont de Nemours Co., and *for mail*, 1101 Rodney St., Wilmington, Del.
- MOYER, Allen V. (Junior, 1909), Mech. Engr., Heine Safety Boiler Co., Phoenixville, Pa.
- MOYER, James A. (1907), Prof. in Charge Dept. Mech. Engrg., Pa. State College, State College, and Pennsylvania Bldg., Philadelphia, Pa.

- MOYER, Samuel Lyon (Junior, 1899), First V. P., The Lunkenheimer Co., P. O. Box 876, and 126 Garfield Pl., Cincinnati, O.
- MUCKLE, John S. (1904), Mech. Engr., Franklin Bank Bldg., and 2023 Walnut St., Philadelphia, Pa.
- MUCKLE, M. R., Jr. (1885), Mech. Engr., 220 S. Broad St., and 1722 Pine St., Philadelphia, Pa.
- MUDD, John Posey (Junior, 1910), Mech. Engr., Midvale Steel Co., and *for mail*, 229 Zeralda St., Philadelphia, Pa.
- MUELLER, Victor H. (Junior, 1907), 25 Maple Terrace, East Orange, N. J.
- MUHLFELD, John E. (1908), V. P. and Genl. Mgr., Kansas City So. Ry., and *for mail*, 3712 Washington St., Kansas City, Mo.
- MUIR, John J. (1896), Mech. Supt., Bass Fdy. & Mch. Co., and *for mail*, 2221 Fairfield Ave., Fort Wayne, Ind.
- MULLANEY, John J. (1901), 150 Nassau St., New York, N. Y.
- MULLEN, John (1886), Pres., Shamokin Iron Wks., 516 N. Franklin St., and 129 S. Shamokin St., Shamokin, Pa.
- MULLER, Edward A. (1890), Secy. and Mgr., King Mch. Tool Co., Winton Pl., Cincinnati, and *for mail*, 501 Mitchell Ave., Avondale, Cincinnati, O.
- MULLER, Paul (1903), Ch. Draftsman, Sprague Elec. Wks. of Genl. Elec. Co., Bloomfield, and *for mail*, 532 Warren St., Newark, N. J.
- MÜLLER, Teile H. (1888), Cons. Engr., Federal Sugar Refining Co., Rm. 44, 138 Front St., and 1340 Madison Ave., New York, N. Y.
- MÜLLHAUPT, Alfred, Jr. (Junior, 1911), Mech. Engr., Corliss Carbon Co., and *for mail*, Box 3, Bradford, Pa.
- MUMFORD, Edgar Huidekoper (1887; 1892), V. P. and Genl. Mgr., Mumford Molding Mch. Co., 30 Church St., New York, N. Y., and *for mail*, 27 Compton Ave., Plainfield, N. J.
- MUNCASTER, Walter J. (1887), V. P. and Genl. Mgr., Cumberland Steel Co., Cumberland, Md.
- MUNRO, George Wesley (1912), Asst. Prof. Mech. Engrg., Purdue Univ., Lafayette, and *for mail*, 24 N. Salisbury St., West Lafayette, Ind.
- MUNSON, Edmund G. (1908), Supt. and Secy., Munson Bros. Co., Utica, N. Y.
- MUNSON, Stanley (Junior, 1911), Engr. of Wks., Oliver Chilled Plow Wks., and *for mail*, 1212 Michigan Ave., South Bend, Ind.
- MURPHY, Benjamin Stewart (Junior, 1905), Asst. Engr., Mech. Dept., Hudson & Manhattan R. R. Co., 30 Church St., New York, N. Y., and *for mail*, 254 Fourth St., Jersey City, N. J.
- MURPHY, Edward J. (1880), Cons. Mech. Engr., Hartford Steam Boiler Inspec. & Ins. Co., and *for mail*, The Linden, 427 Main St., Hartford, Conn.
- MURPHY, Edward Thomas (Junior, 1905), Sales Engr., Carrier Air Conditioning Co., 732 Real Estate Trust Bldg., and 138 S. 50th St., Philadelphia, Pa.
- MURPHY, Frederick E. (1897), 31 Sagamore St., Dorchester, Mass.

- MURPHY, John H. (1912), Mfr. and Contr., John J. Murphy Iron Wks., and *for mail*, P. O. Box 1748, New Orleans, La.
- MURPHY, John Killam (Junior, 1904), Supt. of Constr., Murphy & Dana of New York, N. Y., 839 Chapel St., and *for mail*, P. O. Box 1234, New Haven; also, Killam's Point, Branford, Conn.
- MURPHY, John Z. (1899), Ch. Engr., Chicago Rys. Co., 700 Borland Bldg., and *for mail*, 3818 Lexington St., Chicago, Ill.
- MURPHY, Thomas Robert Hoysted (Junior, 1911), Res. Engr., Jos. H. Wallace & Co., 5 Beekman St., New York, N. Y., and *for mail*, Espanola, Ont., Canada.
- MURPHY, William T. (Junior, 1911), Genl. Mgr., Stand. Mchy. Co., 7 Beverly St., Providence, and 144 Wentworth Ave., Edgewood, R. I.
- MURRAY, Arthur F. (Junior, 1908), Equip. Engr., Blake & Knowles Steam Pump Wks., East Cambridge, Mass.
- MURRAY, Charles R. (Associate, 1889), V. P., Treas. and Charge of Mfg., Barnhart Bros. & Spindler, 168-172 W. Monroe St., Chicago, and 1714 Asbury Ave., Evanston, Ill.
- MURRAY, Geo. R. (1903), Pres., Murray Stone Co., 914 Williamson Bldg., Cleveland, O.
- MURRAY, Henry H. (1899; 1905), Mech. Engr., Victor Talking Mch. Co., Camden, and *for mail*, 713 Main St., Riverton, N. J.
- MURRAY, J. Weidman (1901), Sales Mgr., Allis-Chalmers Co., 814 Frick Bldg., and 6024 Jackson St., E. E., Pittsburgh, Pa.
- MURRAY, Thomas Edward (1894), Second V. P. and Genl. Mgr., N. Y. Edison Co., 57 Duane St., New York, and 783 St. Marks Ave., Brooklyn, N. Y.
- MURRAY, Warren Edwards (1910), Ch. Engr., West. Sugar Refining Co., 23d and Louisiana Sts., and Union League Club, San Francisco, Cal.
- MURRIE, John L. (Junior, 1905), Ford, Bacon & Davis, 115 Broadway, New York, N. Y.
- MUTHER, Ellis F. (Associate, 1907), East. Sales Mgr., Gisholt Mch. Co., 50 Church St., New York, N. Y.
- MUZZARELLI, G. Stuart (Junior, 1912), Cons. Engr., Dover Boiler Wks., 50 Church St., New York, N. Y.
- MYERS, Cornelius T. (1908; 1912), Ch. Engr., Genl. Motors Truck Co., Pontiac, and *for mail*, 59 Pingree Ave., Detroit, Mich.
- MYERS, Curtis Clark (Junior, 1905), Prof. in Charge of Coördination, Univ. of Cincinnati, and 3432 Lyleburn Pl., Cincinnati, O.
- MYERS, David Moffat (1907; 1912), Cons. Engr., 17 Battery Pl., and 309 W. 70th St., New York, N. Y.
- MYERS, Walter S. (1910), Ch. Draftsman, Ladd & Baker, Philadelphia, and *for mail*, 19 N. Front St., Darby, Pa.
- NAEGELE, John C. (1901), Engr. and Arch., 73 Rochelle Ave., Wissahickon, Philadelphia, Pa.
- NAGLE, A. F. (1880), Cons. Engr., 22 S. High St., Bethlehem, Pa.

- NAILLER, Raymond Frederick (1911), Pres. and Genl. Mgr., The Enameled Pipe & Engrg. Co., Elyria, O.
- NAPHTALY, Sam L. (1907), Pres., Oakland & Antioch Ry., 105 Montgomery St., and 1770 Pacific Ave., San Francisco, Cal.
- NASH, Lewis H. (1891), Mech. Engr., Natl. Meter Co., Brooklyn, N. Y., also Pres., Nash Engrg. Co., and 66 West St., South Norwalk, Conn.
- NATE, Emile Henry (Junior, 1904), Mech. Engr. Steam Dept., Thompson-Starrett Co., 660 First Ave., New York, N. Y., and *for mail*, 154 Seymour Ave., Newark, N. J.
- NATHAN, Alfred (Junior, 1891), Pres., Nathan Mfg. Co., 85 Liberty St., and 36 E. 72d St., New York, N. Y.
- NAYLOR, Chas. Wm. (1905), Ch. Engr., Marshall Field & Co., 121 N. State St., and *for mail*, 4429 Congress St., Chicago, Ill.
- NEAVE, Pierson Mitchell (Junior, 1903), Telephone Engr., West. Elec. Co., Bethune and West Sts., New York, N. Y., and 46 Highland Ave., Glen Ridge, N. J.
- NEELY, Frank H. (Junior, 1908), Industrial Engr., 70 Madison Ave., and 40 W. 12th St., Atlanta, Ga.
- NEELY, Fred. L. (Junior, 1909), Central Ga. Power Co., Macon, Ga.
- NEFF, Elmer Hartson (1898), Life Member; N. Y. Mgr., Brown & Sharpe Mfg. Co., Rm. 900, 20 Vesey St., New York, N. Y.
- NEHRBAS, Frederick Phillip (1912), Factory Mgr., Am. Loco. Co., and *for mail*, 185 Massachusetts Ave., Providence, R. I.
- NEIDHARDT, J. Wm. (1910), Ch. Engr., Detrick & Harvey Mch. Co., and *for mail*, 1807 W. Baltimore St., Baltimore, Md.
- NEILER, Samuel Graham (1907), Cons. Mech. and Elec. Engr. and Pres., Neiler, Rich & Co., 1407-1411 Manhattan Bldg., Chicago, and Oak Park, Ill.
- NEILSON, Frederick C. (Associate, 1908), P. O. Box 472, West Hartford, Conn.
- NELSON, Bernard Stanley (Junior, 1910), A. M. Lockett & Co., Ltd., 533 Baronne St., and 1926 N. Claiborne St., New Orleans, La.
- NELSON, Eric Hugo (1909), Ch. Draftsman, Geo. F. Blake Mfg. Co., Cambridge, and *for mail*, 15 Montague St., Arlington Hgts., Mass.
- NELSON, Ernest Benjamin (Junior, 1912), 525 W. Dayton St., Madison, Wis.
- NELSON, James W. (Associate, 1904), Mgr., Supt. and Engr., Estate of Richard Dudgeon, 82 Broome St., New York, and 61 Livingston St., Brooklyn, N. Y.
- NESBIT, Edwin (1907), Zinc Engr., Grasselli Chem. Co., and 2027 E. 77th St., Cleveland, O.
- NESBIT, Joseph Newton Gray (1911), Prof. Exper. Engrg., Ga. Sch. of Tech., Atlanta, Ga.
- NETTLETON, William Alpheus (1905), Ballston Lake, N. Y.
- NEUHAUS, Fritz A. E. (1898; 1906), Genl. Mgr. and Ch. Engr., A. Borsig, Tegel, Berlin, and Olivaerplatz 7, Charlottenburg, Germany.

- NEUREUTHER, Andrew Henry (Junior, 1899), Mech. Engr., West. Clock Co., La Salle, and *for mail*, 1511 Fourth St., Peru, Ill.
- NEVILL, David J. (1900), Mech. Engr., The Stearns Roger Mfg. Co., and 1358 Ogden St., Denver, Colo.
- NEWBURY, George K. (Junior, 1904), Packer Ave., W. S., Bethlehem, Pa.
- NEWCUMB, Chas. L. (1883), Pres., Mech. Engr. and Genl. Mgr., Deane Steam Pump Co., and *for mail*, 57 Fairfield Ave., Holyoke, Mass.
- NEWCUMB, Robert E. (Junior, 1907), Asst. Supt. and Mech. Engr., Deane Steam Pump Co., and *for mail*, 229 Chestnut St., Holyoke, Mass.
- NEWCOMB, Robert Scott (Junior, 1909), Mech. Engr., Walker & Chambers, 222 E. 41st St., and *for mail*, 319 W. 57th St., New York, N. Y.
- NEWELL, Charles Z. (1904; 1912), Mech. Engr., Federal Leather Co., Rm. 202, 47 W. 42d St., New York, and *for mail*, 101 N. Broadway, Yonkers, N. Y.
- NEWELL, William (Junior, 1907), Mech. Engr., Bureau of Factory Inspc., N. Y. State Dept. of Labor, 381 Fourth Ave., New York, and 48 Sidney Pl., Brooklyn, N. Y.
- NEWLIN, Alexander Z. (1909), Mech. Engr., Natl. Tube Co., Kewanee Wks., and *for mail*, 410 McKinley Ave., Kewanee, Ill.
- NEWMAN, Martin Freeze (1911), Asst. Mgr. Water Purifying Dept., Wm. B. Scaife & Sons Co., 221 First Ave., Pittsburgh, and *for mail*, Oakmont, Allegheny Co., Pa.
- NEWTON, Charles E. (Associate, 1895), Treas., Jewell Belting Co., 53 Trumbull St., and 19 Marshall St., Hartford, Conn.
- NEWTON, Charles Hollister (1912), Genl. Mgr., The Osborne & Stephenson Mfg. Co., Plainville, Conn.
- NEWTON, George Henry (1912), Asst. to Mech. Supt., Brown & Sharpe Mfg. Co., and *for mail*, 292 California Ave., Providence, R. I.
- NEWTON, Lewis W. (1903), 18 N. 17th St., East Orange, N. J.
- NEWTON, Peter Augustin (1905), Asst. Genl. Supt., Ill. Steel Co., South Wks., South Chicago, and *for mail*, 5006 Madison Ave., Chicago, Ill.
- NIBECKER, Karl (Junior, 1908), Pittsburgh Rep., Southwark Fdy. & Mch. Co., 804 Frick Bldg., Pittsburgh, and Glen Mills, Pa.
- NICHOLL, John Seymour (Junior, 1909), Publicity Engr. with Walter B. Snow, 170 Summer St., Boston, and Sharon, Mass.
- NICHOLS, Charles Hart (1908), Cons. Engr., 1133 Broadway, and 129 Wadsworth Ave., New York, N. Y.
- NICHOLS, John T. (Junior, 1903), Ch. Engr., Chadwick Engrg. Wks., and *for mail*, 315 King St., Pottstown, Pa.
- NICHOLS, William Wallace (1899), V. P. and Secy., Allis-Chalmers Co., 30 Church St., New York, N. Y.
- NICHOLSON, Saml. T. (1904), Pres. and Genl. Mgr., Vulcan Iron Wks., and *for mail*, 187 Hanover St., Wilkes-Barre, Pa.

- NICKEL, Frank F. (1899), Engr., Henry R. Worthington, Harrison, and *for mail*, 27 Winans St., East Orange, N. J.
- NICKERSON, Alvano T. (1901), W. S. Barstow & Co., 50 Pine St., and 622 W. 135th St., New York, N. Y.
- NICKERSON, Charles Willis (Junior, 1912), Drafting, Constr. and Inspc., Westchester Ltg. Co., Mt. Vernon, and *for mail*, 16 Rochelle Pl., New Rochelle, N. Y.
- NICKERSON, John Winslow (Junior, 1911), Industrial Engr., Glenlyon Dye Wks., Saylesville, R. I.
- NICKERSON, Ralph R. (Junior, 1907), Internatl. Steam Pump Co., 306 Rockefeller Bldg., and 1950 E. 90th St., Cleveland, O.
- NINDE, William Edward (1899; 1903), Assoc. Prof. Mech. Engrg., Syracuse Univ., and *for mail*, 939 Maryland Ave., Syracuse, N. Y.
- NISTLE, George W. (1901), Secy., Ill. Engrg. Co., 315 Dearborn St., Chicago, Ill., and *for mail*, R. F. D. No. 8, Muskegon, Mich.
- NOBLE, Alfred (1907), Manager, 1912-1915; 7 E. 42d St., and 501 W. 120th St., New York, N. Y.
- NOBLE, Patrick (1892), Pres., Pacific Rolling Mill Co., 721-722 Crocker Bldg., and 1168 Clay St., San Francisco, Cal.
- NORCROSS, J. Arnold (1900), Life Member; Secy. and Treas., New Haven Gas Light Co., New Haven, Conn.
- NORDBERG, Bruno Victor (1893), Pres. and Ch. Engr., Nordberg Mfg. Co., and *for mail*, 512 Logan Ave., Milwaukee, Wis.
- NORDBERG, Carl Victor (1908), Rep., Nordberg Mfg. Co., Electric Bldg., Butte, Mont.
- NORDEN, Carl L. (Junior, 1908), Engr., The Sperry Gyroscope Co., 40 Wall St., New York, and *for mail*, 115 Kenmore Pl., Brooklyn, N. Y.
- NORDMEYER, Louis C. (Junior, 1899), Secy. and Treas., Tait-Nordmeyer Engrg. Co., 1214 Liggett Bldg., and 4256 Shenandoah Ave., St. Louis, Mo.
- NORELIUS, E. F. (Junior, 1912), Mech. Engr., Holt Caterpillar Co., Inc., Peoria, Ill.
- NORRIS, Almon E. (1900), Ch. Engr., Mead-Morrison Mfg. Co., 31 Main St., and *for mail*, 57 Avon Hill St., Cambridge, Mass.
- NORRIS, Edson R. (1906), Dir. of Mfg. Operations, Westinghouse Elec. & Mfg. Co., East Pittsburgh, and *for mail*, 205 Vine St., Swissvale, Pa.
- NORRIS, Edward Wentworth (Junior, 1912), Draftsman, Southwark Fdy. & Mch. Co., and *for mail*, 3622 Chestnut St., Philadelphia, Pa.
- NORRIS, Henry Lee (Junior, 1904), Supt. Bldgs. and Grounds, Columbia Univ., and Livingston Hall, Columbia Univ., New York, N. Y.
- NORRIS, Henry McCoy (1892; 1898), Mech. Engr., The Cincinnati Bickford Tool Co., and *for mail*, 330 E. 4th Ave., Cincinnati, O.
- NORRIS, J. H. (1891; 1905), Mech. Engr., Natl. Meter Co., 4207 First Ave., Brooklyn, and 112 Cathedral Parkway, New York, N. Y.

- NORRIS, James U. (Junior, 1907), Asst. Mgr., Rockefeller Inst. for Medical Research, 66th St. and Ave. A, and 383 Central Park West, New York, N. Y.
- NORRIS, Robert V. (1885; 1891), Cons. Engr., 524 Second Natl. Bank Bldg., and 40 S. Franklin St., Wilkes-Barre, Pa.
- NORRIS, Wm. H. (1904), Mech. Engr., Philadelphia Elec. Co., 1000 Chestnut St., and 3622 Chestnut St., Philadelphia, Pa.
- NORRIS, William H., Jr. (Junior, 1909), Lighting Dept., Genl. Elec. Co., and 53 Washington Ave., Schenectady, N. Y.
- NORTHROP, Francis B. (Junior, 1905), Mech. Engr., The Charles Burroughs Co., Newark, and *for mail*, 106 Day St., Orange, N. J.
- NORTON, Arthur Edwin (1911), Asst. Prof. Mech. Drawing, Harvard Univ., and *for mail*, 303 Pierce Hall, Cambridge, Mass.
- NORTON, Charles L. (1910), Prof. of Heat Measurements, Mass. Inst. of Tech., Boston, Mass.
- NORTON, Fred Elmer (1907), Genl. Elec. Co., West Lynn, and *for mail*, 22 Atlantic St., Lynn, Mass.
- NORTON, Harold P. (1906), Capt. U. S. N.; Mem. Bd. of Inspc. for Shore Stas., Navy Dept., and 1704 19th St., N. W., Washington, D. C.
- NORTON, Homer Burdett (1911), Ch. Engr., Elk Tanning Co., and *for mail*, 302 Adams Ave., Ridgway, Pa.
- NORTON, Wendell P. (1903), Supt., Hendey Mch. Co., Torrington, Conn.
- NOTT, Albin James (Junior, 1910), Designing Engr., Central Ga. Power Co., Public Utilities Bldg., and 23 Navarro Flats, Macon, Ga.
- NOURSE, Franklin (1896), P. O. Box 1236, and 187 Nesmith St., Lowell, Mass.
- NOYES, Henry (1899), Life Member; Governing Dir., Noyes Bros., Ltd., 499-501 Bourke St., Melbourne, and Holmby Malvern, Melbourne, Australia.
- NOYES, Henry Taylor (Associate, 1904), Treas., German-Am. Button Co., Rochester, N. Y.
- NOYES, Wm. S. (1896), Min. Engr., 819 Mills Bldg., San Francisco, Cal.
- NUNN, P. N. (1904), Provo, Utah.
- NUSIM, Melach I. (1912), Turbine Engrg., Genl. Elec. Co., and *for mail*, 69 Lakeview Ave., Lynn, Mass.
- NUTE, Edwin Lee (Junior, 1911), Genl. Supt., Winslow Bros. & Smith Co., and 437 Walpole St., Norwood, Mass.
- NYE, Robert Gilson (1912), Asst. Supt., Buffalo Forge Co., and *for mail*, 86 W. Oakwood Pl., Buffalo, N. Y.
- OATLEY, Henry Bigelow (1910), Mech. Engr., Loco. Superheater Co., 30 Church St., New York, N. Y.
- OATMAN, Paul Bartlett (Junior, 1912), Mgr., Ideal Tool & Mfg. Co., Beaver Falls, and 440 Bank St., Beaver, Pa.

- OBERT, Casin W. (Associate, 1904), Pres., Atlantic Mch. Co., 963 Atlantic Ave., Brooklyn, and *for mail*, 255 Marlborough Rd., Flatbush, Brooklyn, N. Y.
- O'BRIEN, Dennis J. (Junior, 1912), Ch. Operating Engr., Birmingham Ry., Light & Power Co., 19th St. and Powell Ave., Birmingham, Ala.
- ODE, Randolph Theodore (1901; 1908), Secy., Providence Lithograph Co., 353 Prairie Ave., Providence, and 557 Fruit Hill Ave., North Providence, R. I.
- ODELL, W. H. (1880), Mech. Engr., Spec., Economic Generation and Application of Steam, 58 Caroline Ave., Yonkers, N. Y.
- OFFUTT, M. Webb (1910), Asst. Managing Dir., Ala. Power Co., and Ala. Interstate Power Co., Brown-Marx Bldg., and Terrace Court, Birmingham, Ala.
- OHLE, Ernest L. (1906; 1908), Prof. Mech. Engrg., Washington Univ., and 1273 Hamilton Ave., St. Louis, Mo.
- OHLSON, Olof (1911), Mech. Supt., Waltham Watch Co., Waltham, and *for mail*, 472 Crafts St., West Newton, Mass.
- OHMES, Arthur K. (1909), Member of Firm, Nygren, Tenney & Ohmes, 87 Nassau St., New York, N. Y.
- O'KEEFFE, James G. (Junior, 1907), Supt. Wks., Pub. Service Gas Co., 35 Front St., Newark, and *for mail*, 10 Nassau Pl., East Orange, N. J.
- O'LEARY, Frank J. (1911), On Time Study Staff, Packard Motor Car Co., and *for mail*, 307 Putnam Ave., Detroit, Mich.
- OLIN, F. W. (Associate, 1895), Pres., Equitable Powder Mfg. Co., West. Cartridge Co., West. Powder Mfg. Co., and Pres., Egyptian Powder Co., East Alton, and *for mail*, 1128 State St., Alton, Ill.
- OLIVENBAUM, John Emmanuel (1911), Radiographer and Asst. Supt., Lakeside Hospital, Cleveland, O.
- OLIVER, E. C. (Junior, 1902), Factory Mgr., Renfro Speedometer Co., 302 Palmer Bldg., 70 Washington Blvd., Detroit, Mich.
- OLMSTED, George C. (Junior, 1909), Supt., Lake Shore Eng. Wks., Marquette, Mich.
- O'NEIL, Frederick Wm. (1901; 1908), Mgr. of Sales, Nordberg Mfg. Co., Milwaukee, Wis.
- O'NEIL, John Francis (1908), Pres., Fulton Iron Wks., and 4236 W. Pine Blvd., St. Louis, Mo.
- O'NEIL, J. G. (Associate, 1904), Contr. Engr., 304 Rookery Bldg., and 5919 Calumet Ave., Chicago, Ill.
- ORCUTT, Guy Hall (Junior, 1909), Elec. Engr., Mich. Alkali Co., and *for mail*, 74 Van Alstyne Blvd., Wyandotte, Mich.
- ORCUTT, Harry Fred Lee (1900), Managing Dir., Gear Grinding Co., Ltd., Handsworth, Birmingham, and *for mail*, Rowington Hall, nr. Warwick, England.
- ORD, Henry C. (1905), 105 St. Luke St., Montreal, P. Q., Canada.
- ORR, Alexander Macklin, Jr. (Junior, 1898), Partner, Gielow & Orr, 52 Broadway, and *for mail*, 132 E. 72d St., New York, N. Y.

- ORR, John (1909), Prof. of Engrg., S. A. Sch. of Mines and Tech., P. O. Box 1176, Johannesburg, Transvaal, S. A.
- ORROK, Geo. A. (1902), Manager, 1911-1914; Mech. Engr., N. Y. Edison Co., 55 Duane St., New York, and *for mail*, 232 E. 17th St., Flatbush, N. Y.
- OSBORN, Francis Conrad (1910), Pres. and Genl. Mgr., The F. C. Osborn Co., 45 E. Fort St., and *for mail*, 64 Lawrence Ave., Detroit, Mich.
- OSBORNE, Charles T. (1908), Pres., Osborne, Rea & Co., 241-243 W. 41st St., and 254 W. 100th St., New York, N. Y.
- OSBORNE, G. F. F. (1903), Box 84, Genl. P. O., and 221 George St., Toronto, Ont., Canada.
- OSBORNE, L. Edward (1912), Ch. Draftsman to Clement F. Street, 166 Washington Ave., Schenectady, N. Y.
- OSBOURN, Millard P. (Junior, 1901), Cons. Engr., 818 Pennsylvania Bldg., Philadelphia, Pa., and 35 S. Cove Rd., Merchantville, N. J.
- OSGOOD, John L. (1898), Mfr. and Dealer in Mchy. and Tools, 121 and 138 Erie Co. Bank Bldg., and 540 Massachusetts Ave., Buffalo, N. Y.
- OSTEMAN, Carl G. (1907), Receiver, Natl. Woodworking Mchy. Co., 94 W. Central St., Boston, and *for mail*, 22 Windermere Rd., Dorchester, Mass.
- OSTERGREN, Oscar P. (1910), Mech. Engr. Rm. 1308, 2 Rector St., New York, and *for mail*, 345 Sumner Ave., Brooklyn, N. Y.
- OSTERMAN, Philip Campbell (1912), Asst. Supt., Am. Gas Furnace Co., and *for mail*, 19 Stiles St., Elizabeth, N. J.
- OSTRANDER, Allen Edward (Associate, 1905), Asst. Mech. Engr., Am. Car & Fdy. Co., 165 Broadway, New York, N. Y., and Wyndemere Ave., Ridgewood, N. J.
- OSWALD, William (1899), Commerzienrath, Bergassessor a. D., Rheinzollstrasse 6, and Rheinanlagen 1 B, Coblenz, Germany.
- OTIS, Spencer (1890), Mfr., 523 Ry. Exch., Chicago, Ill.
- OTTINGER, Harry (Junior, 1910), M. M., Franklin Open Hearth Dept., Cambria Steel Co., and *for mail*, 108 Venango St., Johnstown, Pa.
- OTTO, Henry S. (Junior, 1909), Supt. Truck Dept., Saurer Motor Co., Plainfield, N. J., and *for mail*, 1876 Broadway, New York, N. Y.
- OVIATT, David B. (1891), Asst. Engr., Bd. of Water Supply, City of N. Y., 147 Varick St., and 172 W. 109th St., New York, N. Y.
- OWEN, James (1894), Cons. Engr., 196 Market St., Newark, and *for mail*, Montclair, N. J.
- OWENS, Charles Trump (Associate, 1912), Supv. Engr., Dredging Fleet, Christobal, Canal Zone, Panama, C. A.
- OWENS, Robert B. (Associate, 1892), Secy., The Franklin Inst., Philadelphia, Pa.
- PACKARD, Horace Nelson (Junior, 1911), Engr., Cutler Hammer Mfg. Co., and *for mail*, 451 Woodstock Pl., Milwaukee, Wis.

- PAGE, Charles E. (1912), Genl. Supt., Chase Motor Truck Co., and *for mail*, 100 Delaware St., Syracuse, N. Y.
- PAINE, Sidney B. (1908), Mgr. Mill Power Dept., Genl. Elec. Co., 84 State St., Boston, and 78 Cypress St., Newton Centre, Mass.
- PAINTER, John G. (Junior, 1910), Peerless Motor Car Co., 247 N. Broad St., and 1506 Green St., Philadelphia, Pa.
- PALMER, Arthur C. H. (1900), Asst. Engr., Queensland Ry., and *for mail*, Commercial Union, Chas. Eagle St., Brisbane, Australia.
- PALMER, Arthur E. (Junior, 1909), Sales Engr., L. G. Finlay & Co., 710 N. E. Bldg., Cleveland, and *for mail*, 105 Carlyon Rd., East Cleveland, O.
- PALMER, George W., Jr. (1909), Elec. Engr., Bay State St. Ry. Co., 84 State St., and 58 Roslin St., Boston, Mass.
- PALMER, Perley Burnham (1910), Genl. Supt., Orono Pulp & Paper Co. of Bangor, Orono, Me.
- PALMER, Virgil Maro (Junior, 1905), Standardizing Engr., U. S. Motor Co., Broadway and 61st St., and 609 W. 114th St., New York, N. Y.
- PANGBURN, Dwight Boyce (Junior, 1912), Instr., S. S. S., Yale Univ., 36 N. Sheffield Hall, and *for mail*, 731 Elm St., New Haven, Conn.
- PAPE, James Otto (Junior, 1908), Mgr., Wadena Grain Co., W. F. Starz & Co., Wadena, Ind.
- PARISH, Wm. F. (1902; 1904), Mgr. Lubricating Div., The Tex. Co., 17 Battery Pl., and 854 W. 180th St., New York, N. Y.
- PARISH, Wm. H. (Junior, 1905), Sales Engr., Westmoreland Coal Co., 224 S. 3d St., Philadelphia, and 76 W. Johnson St., Germantown, Philadelphia, Pa.
- PARK, Franklin A. (1900), V. P., The Singer Mfg. Co., 149 Broadway, New York, N. Y.
- PARK, Walter E. (1903), Managing Dir., The Tex. Co., Ltd., and *for mail*, Box 1562, Cape Town, S. A.
- PARK, William R. (1889), Cons. Engr., Hancock Inspirator Co., 23 Watson St., Sta. A, Boston, and 30 Prospect St., Taunton, Mass.
- PARKER, Austin Wilbur (1892; 1901), Mech. Engr., Blake & Knowles Steam Pump Wks., East Cambridge, and *for mail*, 694 Main St., Woburn, Mass.
- PARKER, Chas. D. (1886), Mech. Engr., A. Burlingame Co., 22 Cypress St., and *for mail*, 47 Fales St., Worcester, Mass.
- PARKER, Charles H. (1885; 1903), Asst. Supt. Generating Dept., Boston Edison Co., 39 Boylston St., and 260 Clarendon St., Boston, Mass.
- PARKER, John (1909), Mch. Designer, Brown & Sharpe Mfg. Co., Providence, and *for mail*, 1061 Narragansett Blvd., Edgewood, R. I.
- PARKER, John Castlereagh (1905; 1909), Mech. and Elec. Engr., Rochester Ry. & Light Co., Rochester, N. Y.

- PARKER, John Clinton (1905), Genl. Mgr., Parker Boiler Co., Pa. Bldg., Philadelphia, Pa.
- PARKER, Lee Hamilton (1896), Ry. Engr., Stone & Webster Engrg. Corp., 147 Milk St., Boston, and 40 Strathmore Rd., Brookline, Mass.
- PARKER, Levin S. (1908), Ch. Engr., Atlas Dredging Co., 1629 Whitehall Bldg., New York, and 1814 Ave. J, Brooklyn, N. Y.
- PARKER, Walter Edward (1881), Life Member; Agt., Pacific Mills, and *for mail*, 217 Haverhill St., Lawrence, Mass.
- PARKHURST, Frederic A. (Associate, 1904), Organizing Engr., 29 Alger Ave., Detroit, Mich.
- PARR, Harry L. (1910), Asst. Prof. Mech. Engrg., Columbia Univ., New York, N. Y.
- PARROCK, H. P. (1911), Lumen Bearing Co., Buffalo, N. Y.
- PARSHALL, Horace Field (1893), Cons. Engr., Salisbury House, London Wall, E. C., London, England.
- PARSON, Chas. H. (Junior, 1906), Treas., Parson Mfg. Co., Singer Bldg., New York, N. Y.
- PARSONS, Burt Hewitt (1912), Mech. Engr., Mississippi River Power Co., Keokuk, Ia.
- PARSONS, Edmund S. (Junior, 1909), Mech. Engr., Remington Typewriter Wks., and *for mail*, 230 Otsego St., Ilion, N. Y.
- PARSONS, Frederick W. (1889), Supt., Rand Drill Co., and Brookside Park, Tarrytown, and *for mail*, 300 Maple Ave., Elmira, N. Y.
- PARSONS, George K. (1911), Asst. to Pres., Am. Vulcanized Fibre Co., Wilmington, Del.
- PARSONS, H. de B. (1885; 1887), Prof. Emeritus, Rensselaer Poly. Inst. of Troy; Cons. Engr., 22 William St., and 36 E. 61st St., New York, N. Y.
- PARSONS, Harry Noble (Junior, 1912), Spec. Apprentice, McKeen Motor Car Co., and *for mail*, 1905 Lothrop St., Omaha, Neb.
- PARSONS, W. Everett (1899), Cons. Engr., 1639 Third Ave., New York, N. Y., and *for mail*, 818 De Graw Ave., Newark, N. J.
- PARSONS, William Claude (Junior, 1906), Blast Furnace Draftsman, Carnegie Steel Co., Homestead Steel Wks., Munhall, and *for mail*, 2433 Woodstock Ave., Braddock, Pa.
- PASCALL, Richard Henry (1894), Pres., Pickering Governor Co., and 329 Main St., Portland, Conn.
- PASSANO, Edward Boteler (1912), Pres. and Mgr., The Williams & Wilkins Co., 2427 Greenmount Ave., Baltimore, Md.
- PATITZ, Gerhardt J. (1900; 1907), Ch. Engr., Peter Schoenhofen Brewing Co., 526 W. 18th St., Chicago, and 715 S. Ridgeland Ave., Oak Park, Ill.
- PATITZ, J. F. Max (1891; 1900), Cons. Mech. Engr., Allis-Chalmers Co., and *for mail*, 473 38th St., Milwaukee, Wis.
- PATTERSON, A. W., Jr. (1897; 1903), Dist. Mgr. Hoist Dept., The Yale & Towne Mfg. Co., 9 Murray St., New York, N. Y., and *for mail*, Roselle, N. J.

- PATTERSON, Peter C. (Junior, 1897), Ch. Engr., Natl. Tube Co., 554 Frick Annex, Pittsburgh, and 15th St. and Library Ave., McKeesport, Pa.
- PATTERSON, Wistar E. (Associate, 1909), Production Clerk, Elec. Storage Battery Co., and *for mail*, Union League, Philadelphia, Pa.
- PATTISON, Frank A. (1903), Cons. Engr., Centurian Bldg., 1182 Broadway, New York, N. Y., and Colonia, N. J.
- PATTON, John H. (Junior, 1898), Engr. and M. M., N. Y. Tanning Extract Co., West and Green Sts., and *for mail*, 633 Leonard St., Brooklyn, N. Y.
- PAUL, Charles Edward (1908), Assoc. Prof. Mechanics, Armour Inst. of Tech., and *for mail*, 6238 Ellis Ave., Chicago, Ill.
- PAUL, John Wallace (1895; 1896), P. O. Box 85, Groton, N. Y.
- PAULSMEIER, Albert Carl (1910), V. P. and Ch. Engr., Byron Jackson Iron Wks., San Francisco, and *for mail*, 1530 Union St., Alameda, Cal.
- PAWLETT, Louis M. (Junior, 1911), Cons. Engr., 231 Fairfield Ave., Bridgeport, Conn.
- PAYNE, Nathan B. (Junior, 1903), Mgr. Government Dept., Manning, Maxwell & Moore, 85 Liberty St., and 31 W. 10th St., New York, N. Y.
- PAYNE, Sheldon F. (1891; 1907), M. M., Goodyear's M. R. Shoe Co., and *for mail*, 18 Park Pl., Naugatuck, Conn.
- PAYSON, T. Elliott (Associate, 1906), Genl. Supt., The Seneca Falls Mfg. Co., Seneca Falls, N. Y., and *for mail*, 218 Clerk St., Jersey City, N. J.
- PEABODY, E. H. (1900), Marine Dept., Babcock & Wilcox Co., 85 Liberty St., New York, N. Y.
- PEAR, James J. (1891), 33 Allen Pl., Hartford, Conn.
- PEARSALL, Gilbert H. (Associate, 1908), V. P., Jacobs-Shupert Firebox Co., 30 Church St., New York, N. Y., and Orange Heights Ave., West Orange, N. J.
- PEARSON, Albert L. (1911), Elec. Engr., Lockwood, Greene & Co., 60 Federal St., Boston, Mass.
- PEARSON, Charles Ivar (1912), Mech. Draftsman and Designer, 36 Trowbridge St., Cambridge, Mass.
- PEARSON, F. S. (1899), Life Member; Cons. Engr., 115 Broadway, New York, N. Y.
- PEARSON, Walter Ambrose (1907), 135 Front St., New York, N. Y.
- PEARSON, Walter B. (1886), Pres., Stand. Screw Co., 81 E. Madison St., and 6222 Sheridan Rd., Chicago, Ill.
- PECK, Chas. B. (1903; 1905), Mgr., B. F. Sturtevant Co., 50 Church St., New York, and 284 Halsey St., Brooklyn, N. Y.
- PECK, Eugene C. (1909), Genl. Supt., Cleveland Twist Drill Co., and 1242 E. 49th St., Cleveland, O.
- PECK, Henry W. (Associate, 1908), V. P. and Genl. Mgr., Schenectady Ill. Co., and Mohawk Gas Co., and 32 Waverly Pl., Schenectady, N. Y.

- PECK, Staunton B. (1890), V. P., Link-Belt Co., 39th St. and Stewart Ave., and 5006 Drexel Blvd., Chicago, Ill.
- PEDDLE, John B. (1909), Prof. Mch. Design, Rose Poly. Inst., and *for mail*, 2117 N. 10th St., Terre Haute, Ind.
- PEEBLES, Thomas Armstrong (1912), Designing Engr., Green Engrg. Co., 28 E. Jackson St., Chicago, Ill.
- PEEK, George Meredith (1892; 1900), Mech. Engr. Constr. Dept., Water Wks., 34 E. Grand Ave., and 1285 Hamilton Ave., St. Louis, Mo.
- PEEL, Fred Pardington (Junior, 1912), Government Draftsman and Engr., and Cons. Wk., 1419 Clifton St., Washington, D. C.
- PEIRCE, Wm. Henry (1887), V. P. and Genl. Mgr., Baltimore Copper Smelting & Rolling Co., and The Severn Apts., Baltimore, Md.
- PELLISSIER, George E. (Associate, 1909), Genl. Mgr. and Treas., Pellissier Engrg. Co., 21 Besse Pl., and *for mail*, 796 Sumner Ave., Springfield, Mass.
- PELLY, Lorenzo J. (1912), Ch. Engr., Central San Agustin, San Agustin, Calbarien, Cuba.
- PEMBERTON, Carlysle (Junior, 1912), Repair Wk. in Auto. Garage, Pemberton & Lyons, Oakland, Ill.
- PENDERGAST, Roland Ball (1912), Engr., Stone & Webster Engrg. Corp., and *for mail*, 48 Beacon St., Boston, Mass.
- PENDLETON, Frank E. (Junior, 1902), Ch. Engr., N. Y. Steam Co., 140 Cedar St., New York, N. Y., and Erwin Park Rd., Montclair, N. J.
- PENNEY, Edgar (1880), Cons. Engr., Alberger Pump & Condenser Co., Newburgh, N. Y.
- PENNEY, Rodney Clapp (1905), Mech. Engr., Dodge Mfg. Co., and *for mail*, 87 Montgomery St., Bangor, Me.
- PENNEY, Rupert L. (Junior, 1906), Testing Engr., Winchester Repeating Arms Co., New Haven, and *for mail*, 126 Willard St., Westville Sta., New Haven, Conn.
- PENNINGTON, James H. (1902), Supt. Constr. and Power, Am. Smelting & Refining Co., and *for mail*, 734 Roland Ave., Baltimore, Md.
- PENNOCK, George Alger (Junior, 1903), Asst. Supt. Service and Maintenance, West. Elec. Co., Hawthorne Sta., Chicago, Ill., and *for mail*, Weston, Mass.
- PENRUDDOCKE, J. H. (1889), Mech. Engr., Farm 1464, Muhorini, British East Africa.
- PENTZ, Albert D. (1891), Box 33, West Lynn, Mass.
- PEPER, John Henry, Jr. (Junior, 1910), Engr., 26 Broadway, New York, and *for mail*, 364 Lafayette Ave., Brooklyn, N. Y.
- PERCY, Earl N. (Junior, 1907), Mech. Engr. Fuel Oil Dept., Stand. Oil Co., 461 Market St., San Francisco, and Y. M. C. A., Oakland, Cal.
- PERKINS, G. Hawthorne (Associate, 1907), Head Textile Engrg. Dept., Lowell Textile Sch., Lowell, Mass.
- PERKINS, John B. (Associate, 1910), Pres., John B. Perkins Co., 141 Milk St., Boston, Mass.

- PERKINS, Julius A. (1911), Mech. Engr., 25 Broad St., New York, N. Y.
- PERKS, George W. (1908), Supt., Am. Seeding Mch. Co., and 1325 E. High St., Springfield, O.
- PERRY, Ernest B. (1907), Mgr., Industrial Wks., and 1515 Fifth St., Bay City, Mich.
- PERRY, Frank B. (1902; 1908), Mill Power Dept., Genl. Elec. Co., 84 State St., Boston, and *for mail*, 53 Stearns St., Newton Centre, Mass.
- PERRY, George Arthur (1912), Mech. Engr., Jones & Lamson Mch. Co., Springfield, Vt.
- PERRY, Samuel B. (Junior, 1895), Ins. Engr., 68 William St., New York, and Hollis, L. I., N. Y.
- PERRY, Wm. A. (1880), 111 Broadway, and *for mail*, 7 E. 56th St., New York, N. Y.
- PESSANO, Antonio C. (1898), Pres. and Genl. Mgr., Great Lakes Engrg. Wks., and *for mail*, 652 Jefferson Ave., Detroit, Mich.
- PETERSON, Carl H. (1910), Southwestern Rep., The Baldwin Loco. Wks., and Stand. Steel Wks. Co., 1612-1614 Wright Bldg., St. Louis, and 509 Lockwood Ave., Webster Grove, Mo.
- PETERSON, Franklin C. (1912), In Charge Engrs. and Draftsmen, West. Elec. Co., Hawthorne, and *for mail*, 641 Lyman Ave., Oak Park, Ill.
- PETERSON, John William (1911), Pres. and Mgr., Peterson Engrg. Co., 30 Church St., New York, N. Y., and 24 Webster Pl., East Orange, N. J.
- PETTENGILL, George D. (Junior, 1907), Ch. Draftsman, Warsaw Elev. Co., and *for mail*, Box 742, Warsaw, N. Y.
- PETTIS, Clifton D. (1905), Am. Brake Shoe & Fdy. Co., 1414 McCormick Bldg., Chicago, Ill.
- PHARR, Eugene A. (1908), Sugar Planter and Mfr., Morgan City La.
- PHARR, Henry Newton (1907), Sugar Planter and Mfr., Iberia Parish, Olivier, La.
- PHELPS, Charles C. (Junior, 1909), Adv. Dept., Edison Storage Battery Co., Orange, N. J.
- PHELPS, Frederick Augustus (1892), Mech. Engr. and Mill Arch., Union Bldg., 9-15 Clinton St., Newark, and 100 Glenwood Ave., East Orange, N. J.
- PHETTEPLACE, Thurston M. (1904; 1911), Asst. Prof. Mech. Engrg., Brown Univ., and *for mail*, 1596 Broad St., Providence, R. I.
- PHILBRICK, Frank B. (1891), 20 College Ave., Waterville, Me.
- PHILBRICK, Herbert Shaw (Junior, 1907), Prof. Mech. Engrg., Northwestern Univ., and *for mail*, 2130 Sherman Ave., Evanston, Ill.
- PHILLIPS, Ellis L. (Junior, 1901), Cons. Engr., Rm. 1663, 50 Church St., and 622 W. 135th St., New York, N. Y.
- PHILLIPS, Franklin (1881), Pres., Hewes & Phillips Iron Wks., 8 Orange St., and 539 Mt. Prospect Ave., Newark, N. J.

- PICKOP, George B. (1908), Genl. Supt., Universal Mch. Screw Co., 806 Windsor St., Hartford, Conn.
- PIERCE, Edward L. (1898), V. P., Semet-Solvay Co., V. P., By-Products Coke Corp., Box 1 and 2, Syracuse, N. Y.
- PIERCE, Frederick Emery (1909), Ch. Engr., The N. J. Zinc Co., 55 Wall St., New York, N. Y., and 397 Turrell Ave., South Orange, N. J.
- PIERCE, Richard H. (1894), Cons. Engr., 35 Congress St., Boston, and *for mail*, 462 Walnut St., Newtonville, Mass.
- PIERCY, Edgar (1891), 282 Washington Ave., Elyria, O.
- PIERLE, Henry Charles (1911), Spec. Rep. and Engr., The R. K. LeBlond Mch. Tool Co., Cincinnati, O.
- PIERPONT, Robert (1911), Factory Mgr., Wis. Motor Mfg. Co., Milwaukee, Wis.
- PIEZ, Charles (1894), Pres., Link Belt Co., 39th and Stewart Ave., and 4359 Grand Blvd., Chicago, Ill.
- PIGOTT, Reginald J. S. (Junior, 1912), Asst. Prof. Steam Engrg., Columbia Univ., Engrg. Bldg., New York, N. Y.
- PILCHER, John A. (1895; 1904), Mech. Engr., Norfolk & West. Ry. Co., and *for mail*, 436 13th Ave., S. W., Roanoke, Va.
- PILLMORE, Frederick (1907), Mech. Engr., 257 Bryant Ave., Syracuse, N. Y.
- PILLSBURY, Charles Lucien (1912), Mech. and Elec. Cons. Engr., 805 Metropolitan Life Bldg., Minneapolis, Minn.
- PINGER, George C. (Junior, 1907), Engr., The West. Conduit Co., 516 Stambaugh Bldg., and *for mail*, 721 Elm St., Youngstown, O.
- PINGREE, Edwin Daniel (1905), V. P. and Engr., Mfrs. Mut. Fire Ins. Co., 815 Grosvenor Bldg., and 99 Hamilton St., Providence, R. I.
- PINKERTON, Andrew (1892), Elec. Engr., Am. Sheet & Tin Plate Co., and *for mail*, P. O. Box 427, Pittsburgh, and 6605 Virginia Ave., Ben Avon, Pa.
- PITKIN, Arthur Frederick (Junior, 1907), Mech. Engr., Genl. Elec. Co., and *for mail*, 103 Waverly Pl., Schenectady, N. Y.
- PITKIN, Stephen H. (1891), First V. P., Wellman-Seaver-Morgan Co., Cleveland, and *for mail*, 682 W. Market St., Akron, O.
- PITMAN, Stephen Minot (Associate, 1892), Secy., Narragansett Mut. Fire Ins. Co., P. O. Box 1422, and 97 William St., Providence, R. I.
- PLACE, Clyde R. (Associate, 1907), Mech. Engr., 70 E. 45th St., New York, N. Y., and River Edge, N. J.
- PLAINE, George Hunter (1912), Supt., Terry Steam Turbine Co., and *for mail*, 12 Baltimore St., Hartford, Conn.
- PLANT, John William (1911), Sales Agt. and Engr., Edgar Allen Am. Manganese Steel Co., 649 Monadnock Bldg., San Francisco, and 24 Crystal Spring Rd., San Mateo, Cal.
- PLANTINGA, Pierre (Junior, 1894), Pres., Gas Mchy. Co., Citizens Bldg., and 1913 E. 73d St., Cleveland, O.
- PLATT, John (1889; 1890), Pres., John Platt & Co., 97 Cedar St., New York, N. Y., and Westfield, Union Co., N. J.

- PLATT, Wilber O. (1902), V. P. and Supt., Jos. Reid Gas Eng. Co., Oil City, Pa.
- PLEASANTON, F. Rodney (Junior, 1908), Engr., Pa. Steel Co., Steelton, and 117 Pine St., Harrisburg, Pa.
- PLUNKETT, Charles T. (1909), V. P. and Secy., Berkshire Cotton Mfg. Co., and 8 Park St., Adams, Mass.
- POLHEMUS, Louis Edward (Junior, 1909), Mech. and Elec. Engr., Cubo Min. & Milling Co., Apartado 49, Guanajuato, Mex.
- POLK, Anderson (Associate, 1904), Assoc. with The Lowe Bros. Co. of Dayton, O., Paint Makers, 608 Continental Bldg., Baltimore, and 10 Elmwood Rd., Roland Park, Baltimore Co., Md., and *for mail*, Engrs' Club, New York, N. Y.
- POLLAK, Charles P. (Associate, 1901), Engineers Club, 32 W. 40th St., New York, N. Y.
- POLLARD, Seabury Gould (1912), Cons. Engr., 603 Miles Greenwood Bldg., Cincinnati, O.
- POLLARD, Willard Lacy (Junior, 1907), Asst. Examiner, Pat. Office, Div. 5, and *for mail*, 1502 Meridian Pl., Washington, D. C.
- POLLEDO, Y. (Junior, 1888), Manzaneda 16, Matanzas, Cuba.
- POLSON, Joseph A. (1906; 1912), Asst. Prof. Mech. Engrg., Mich. Agri. College, 201 Engrg. Bldg., East Lansing, Mich.
- POMEROY, Harry D. (1892; 1904), 384 W. Fayette St., and 110 Baker Ave., Syracuse, N. Y.
- POMEROY, L. R. (1890; 1909), Cons. Engr., 105 W. 40th St., New York, N. Y., and 246 Berkeley Ave., Orange, N. J.
- POMEROY, William D. (1908), Genl. Supt., Goulds Mfg. Co., and *for mail*, 4 Johnston St., Seneca Falls, N. Y.
- POND, Henry O. (1904; 1907), Engr. in Charge, and Supt. of Piping, Westinghouse, Church, Kerr & Co., 8-10 Bridge St., New York, N. Y., and Tenafly, N. J.
- POOLE, Cecil P. (1909), Cons. Engr., 1021 Candler Bldg., and 141 North Ave., E., Atlanta, Ga.
- POPE, Chas. Edwd. (1897), Mech. Engr., Natl. Malleable Castings Co., Cleveland, O.
- POPE, Harold L. (1905; 1912), Mgr., Pope Mfg. Co., West Wks., Hartford, Conn.
- POPPEHUSEN, P. Albert (1912), Pres., Green Engrg. Co., 28 E. Jackson St., Chicago, Ill.
- PORTER, Holbrook F. J. (1880; 1884), 25 W. 39th St., New York, N. Y.
- PORTER, H. Hobart (1902), Sanderson & Porter, Engrs., 52 William St., New York, and Lawrence, L. I., N. Y.
- PORTER, Hollis P. (1910), Engr. of Constr., A. M. Lockett & Co., New Orleans, La., and 1222 Kansas Ave., Topeka, Kan.
- PORTER, John A. (1908), Genl. Supt., Bibb Mfg. Co., and *for mail*, P. O. Box 413, Macon, Ga.
- PORTER, Will Roswell (Associate, 1910), Asst. M. M., S. S. White Dental Mfg. Co., S. I. Factory, and *for mail*, 5941 Ambboy Rd., Prince Bay, S. I., N. Y.

- PORTERFIELD, Henry A. (1890), 600 Lewis Bldg., Pittsburgh, Pa.
- POSEY, James (Junior, 1907), Cons. Engr., 328 N. Charles St., and 4005 Liberty Heights Ave., Forrest Park, Baltimore, Md.
- POSGATE, James Stephen (1912), Supt. of Compressor Stas., Kan. Natural Gas Co., Independence, Kan.
- POSSELT, Ejnar (Junior, 1907), Cons. Engr., Posselt & Co., 511 Ideal Bldg., Denver, Colo.
- POST, George Adams, Jr. (Junior, 1906), Sales Mgr., Stand. Coupler Co., 1005 Peoples Gas Bldg., and 4906 Sheridan Rd., Chicago, Ill.
- POTBURY, Alfred Henry (1911), Mech. Engr. with Robert Dalziel, Jr., 218 First St., San Francisco, and 1530 La Loma Ave., Berkeley, Cal.
- POTTER, Andrey A. (1912), Prof. Steam and Gas Engrg., in Charge Mech. Engrg. Course, Kan. State Agri. College, Manhattan, Kan.
- POTTER, Philip Arthur (1911), Cons. Engr., Potter & Bartram, 30 Church St., New York, and 50 Orange St., Brooklyn, N. Y.
- POTTER, Wm. Bancroft (1897), Engr. Ry. and Traction Dept., Genl. Elec. Co., and 9 Morris Ave., Schenectady, N. Y.
- POTTER, Wm. Bleecker (1895), Mgr. and Ch. Engr., St. Louis Sampling & Testing Wks., 713 Clark Ave., and 4021 Washington Blvd., St. Louis, Mo.
- POTTS, S. Warren (1909), Mech. Engr., 1820 Park Row Bldg., New York, and *for mail*, 34 Shepherd Ave., Brooklyn, N. Y.
- POULTNEY, John Livingston (1908), Ch. Engr., James Boyd & Bro., Inc., 25th and Wharton Sts., Philadelphia, and Haverford, Pa.
- POWEL, Samuel W. (1880), Mech. Engr., Am. Radiator Co., and *for mail*, 679 Auburn Ave., Buffalo, N. Y.
- POWELL, E. Burnley (1904; 1912), Mech. Engr., Stone & Webster Engrg. Corp., 147 Milk St., Boston, Mass.
- POWELL, John Edgar (1904), Cons. Engr., 418 Union Trust Bldg., Washington, D. C.
- POWELL, Marcus (Associate, 1897), Mgr., Crosby Steam Gage & Valve Co., 44 Dey St., New York, N. Y., and Avon-by-the-Sea, N. J.
- POWELL, William Henry (1908), Elec. Engr-in-charge, Allis-Chalmers Co., and 2508 Grand Ave., Milwaukee, Wis.
- POWER, Frederick Macy (1892), Orchard Rd., Solvay, N. Y.
- POWER, Pomeroy W. (1903), Mech. Engr., Genl. Elec. Co., and *for mail*, 306 South St., Pittsfield, Mass.
- POWERS, Alexander Merrell (Junior, 1912), Testing Hyd. Mchy., Henry R. Worthington, Harrison, N. J., and *for mail*, 154 Sixth Ave., Brooklyn, N. Y.
- PRATHER, H. B. (1893; 1895; 1898), Cons. Power, Htg. and Vent. Engr., Rockefeller Bldg., and 2234 E. 80th St., Cleveland, O.

- PRATT, Charles Richardson (1896), Cons. Engr., 39 Gates Ave., Montclair, N. J., and *for mail*, care of The Motor Club, Coventry St., W., London, England.
- PRATT, Francis C. (1892; 1897), care of Genl. Elec. Co., Schenectady, N. Y.
- PRATT, James Alfred (1908; 1910), Dir., Williamson Free Sch. of Mech. Trades, Williamson School P. O., Delaware Co., Pa.
- PRELLWITZ, William (1900), Ch. Engr., Ingersoll-Rand Co., Phillipsburg, N. J., and *for mail*, 66 N. 3d St., Easton, Pa.
- PRESCOTT, Fred. M. (1901), Manager, 1905-1908; Pres., Fred. M. Prescott Steam Pump Co., 60th and Greenfield Aves., and 609 Lake Drive, Milwaukee, Wis.
- PRESSINGER, W. P. (Associate, 1903), Mgr. Compressor Dept., Chicago Pneu. Tool Co., 50 Church St., and 103d St. and Riverside Drive, New York, N. Y.
- PRESTON, Geo. B. (1891; 1900), Engr., Westinghouse, Church, Kerr & Co., 10 Bridge St., New York, N. Y., and Leonia, N. J.
- PRESTON, Ralph A. D. (Junior, 1912), Asst. to Factory Mgr., The Goodyear Tire & Rubber Co., and *for mail*, 641 E. Buchtel Ave., Akron, O.
- PRICE, Albert M. (1899; 1904), Cons. Mech. Engr., 56 River St., and *for mail*, 825 Douglas Ave., Elgin, Ill.
- PRICE, Henry M. (1912), Mech. Engr., Office of Supv. Arch., Treasury Dept., and *for mail*, 1721 W. North Ave., Baltimore, Md.
- PRICE, Melvin (Associate, 1905), Instr. in Mch. Design, The Univ. of Rochester, and 103 Harper St., Rochester, N. Y.
- PRICE, Norman I. (Junior, 1902), Price & Martyn, 68½ Pitt St., Sydney, N. S. W., Australia.
- PRICE, William T. (Junior, 1910), Middle East Sales Engr., De La Vergne Mch. Co. of N. Y., 380 Bourse Bldg., Philadelphia, and 6308 Ross St., Germantown, Philadelphia, Pa.
- PRIMROSE, John (1907), Ch. Engr., Power Spec. Co., 111 Broadway, New York, N. Y.
- PRINCE, Walter F. (1905), Supt. Fdy. Dept., Henry R. Worthington, Harrison, and 1365 North Ave., Elizabeth, N. J.
- PRINDLE, Edwin Jay (1910), Pat. Law, Prindle & Wright, Trinity Bldg., 111 Broadway, New York, N. Y.
- PROAL, Arthur B., Jr. (1905), Sales Engr., Robins Conveying Belt Co., Park Row Bldg., 13 Park Row, New York, N. Y., and *for mail*, 30 Edgewood Ave., Nutley, N. J.
- PROCTOR, Redfield (1905; Associate, 1906), Asst. Genl. Supt., Vt. Marble Co., Proctor, Vt.
- PROSSER, Joseph George (1891; 1898), 1301 E. 60th St., Chicago, Ill.
- PROSSER, Thomas (Associate, 1893), Thomas Prosser & Son, 15 Gold St., New York, N. Y.
- PROUT, Henry Byrd (Junior, 1911), Salesman, Westinghouse Mch. Co., 201 Devonshire St., Boston, and 61 Pleasant St., Brookline, Mass.

- PRYOR, Frederick L. (1900; 1906), Prof. Exper. Engrg., Stevens Inst. of Tech., Hoboken, and 421 Fourth Ave., Newark, N. J.
- PRYOR, Robert W., Jr. (Junior, 1907), Firm of Koithan & Pryor, 39 Cortlandt St., New York, N. Y., and 199 Roseville Ave., Newark, N. J.
- PUCHTA, Edward (1909), Asst. Supt., West. Elec. Co., Hawthorne Sta., and *for mail*, 5062 Sheridan Rd., Chicago, Ill.
- PUGSLEY, Edwin (Junior, 1911), Winchester Repeating Arms Co., and *for mail*, 77 Everit St., New Haven, Conn.
- PULIS, Wm. Eugene (Junior, 1909), Industrial Engr., Westinghouse Elec. & Mfg. Co., East Pittsburgh, and 253 Maple Ave., Edgewood Park, Swissvale, Pa.
- PULMAN, Thomas Chas. (1908), Sales Mgr., Worthington Pump Co., Ltd., 153 Queen Victoria St., London, and 43 Birch Grove, Acton Hill, London, England.
- PULSIFER, Harold M. (1907), 1622, 431 S. Dearborn St., and 111 Bellevue Pl., Chicago, Ill.
- PURDY, Henry T. (1909), Mgr., Purdy Engrg. Co., San Jose, Costa Rica, C. A.
- PURINTON, Arthur James (1893), care of East St. Louis & Suburban Ry. Co., East St. Louis, Ill.
- PUSEY, Charles W. (1880), Manager, 1892-1895; Life Member; Inspc. Engr., The Pusey & Jones Co., Wilmington, Del.
- PUTNAM, Morris Havens (1910), Engr. and Genl. Mgr., Terry Constr. Co., 252 W. 60th St., New York, N. Y.
- QUICK, Howard Prescott (1894), Mech. Engr., The Pearson Engrg. Corp., Ltd., 115 Broadway, New York, and 532 Third St., Brooklyn, N. Y.
- QUICK, Ray Lewis (Junior, 1911), Isthmian Canal Com., Pedro Miguel, Canal Zone, Panama, and 426 W. Mill St., Ithaca, N. Y.
- QUIGLEY, Jas. Edwin (Junior, 1900), Mgr. Insulation Dept., Armstrong Cork Co., 23d and River, and *for mail*, 466 Rebecca St., Pittsburgh, Pa.
- QUIMBY, William E. (1889; 1905), Pres., William E. Quimby, Inc., 548 W. 23d St., New York, N. Y., and Llewellyn Park, Orange, N. J.
- QUINN, Charles Henry (1912), Asst. Engr. M. P., Norfolk & West. Ry., and *for mail*, Hotel Roanoke, Roanoke, Va.
- QUINT, Alanson D. (1891), Mgr., Turret Drill Co., 12 Wells St., and *for mail*, 8 Clinton St., Hartford, Conn.
- QUIRKE, Edward D. (1911), Designer and Checker, Natl. Tube Co., and *for mail*, 212 S. Tremont St., Kewanee, Ill.
- RAE, John (1912), Ch. Draftsman, Tabor Mfg. Co., Philadelphia, and *for mail*, 5231 Pine St., West Philadelphia, Pa.
- RAJAGOPALAN, T. R. (Junior, 1912), Draftsman, The Carnatic Mill Co., Ltd., 5/13 Vinatheertha Mudaly St., Pursewakam, Vepery, Madras, India.
- RAMSAY, Herbert Hartley (Junior, 1910), Asst. Engr. with John Hays Hammond and Harris Hammond, 71 Broadway, and *for mail*, 15 E. 48th St., New York, N. Y.

- RAMSDEN, John Thomas (1906), Ch. Engr., The Tabor Mfg. Co., 18th and Hamilton Sts., and *for mail*, 1911 N. 17th St., Philadelphia, Pa.
- RANDALL, Dwight T. (1904), Cadillac Motor Car Co., Detroit, and *for mail*, Birmingham, Mich.
- RANDALL, John Arthur (Junior, 1911), Instr. Mechanics and Heat, Pratt Inst., Brooklyn, N. Y.
- RANGLES, George E. (1912), V. P., in Charge of Mfg. and Sales, The Foote-Burt Co., Cleveland, O.
- RANDOLPH, L. S. (1884), Life Member; Cons. Engr., Blacksburg, Va.
- RANKIN, Thos. L. (1892), Sacketts Harbor, N. Y.
- RANKIN, William A. (1907), Elec. Engr., Copper Range Consld. Co., Painesdale, Mich.
- RANSOM, Allan (Associate, 1903), Beverly Hills, Los Angeles, Cal.
- RANSOM, T. W. (1909), Cons. Mech. Engr., Bd. of Pub. Wks., and 16 Belmont Ave., San Francisco, Cal.
- RAPLEY, Frederick Harvey (1905), M. Clark & Co., 1 Victoria St., Westminster, S. W., London, England.
- RAQUÉ, Philip E. (1891), Cons. Engr., 132 Nassau St., New York, N. Y., and 82 Booraem Ave., Jersey City, N. J.
- RATHBUN, Edward (1908), Second V. P., Rathbun-Jones Engrg. Co., Spencer St., Toledo, O.
- RATHBUN, Geo. Jay (1904), V. P. and Engr., Rathbun-Jones Engrg. Co., and 2447 Collingwood Ave., Toledo, O.
- RATTLE, Paul S. (Junior, 1908), Mech. Engr., Mine & Smelter Supply Co., 17th and Blake Sts., and 1310 E. Colfax Ave., Denver, Colo.
- RAUTENSTRAUCH, Walter (1904; 1911), Prof. Mech. Engrg., Columbia Univ., New York, N. Y.
- RAWSON, Louis W. (Associate, 1904), Supt. Washburn Shops, Worcester Poly. Inst., Worcester, Mass.
- RAY, David H. (1904; 1911), Life Member; Cons. Engr., 27 W. 33d St., New York, and *for mail*, 184 Madison Ave., Tompkinsville, S. I., N. Y.
- RAY, Frederick (Junior, 1903), Ch. Engr., Alberger Pump & Condenser Co., 140 Cedar St., New York, N. Y., and Hemlock Rd., Short Hills, N. J.
- RAY, Martin Hasset (Junior, 1912), Aide to Dir., Dept. of Pub. Safety, City Hall, and *for mail*, 3804 Locust St., Philadelphia, Pa.
- RAY, Walter Thornton (1912), in Charge Engrg. Dept., Clinchfield Fuel Co., Spartanburg, S. C.
- RAYMOND, Alfred (1904), Genl. Mgr., Drainage, 503 City Hall Annex, and *for mail*, 1444 State St., New Orleans, La.
- RAYMOND, Herbert Emmons (Junior, 1906), Mech. Engr., Sheldon Springs, Vt.
- RAYMOND, Ward (1901), Asst. Engr., Ingersoll-Rand Co., Phillipsburg, N. J., and *for mail*, 908 Paxinosa Ave., Easton, Pa.

- RAYNAL, Alfred H. (1884), Manager, 1889-1902; Mech. Engr. Bureau of Steam Engrg., Navy Dept., and *for mail*, 1626 Riggs Pl., N. W., Washington, D. C.
- REA, James Childs (Junior, 1911), Supt. Rivet, Track, Bolt and Galvanizing Depts., Oliver Iron & Steel Co., S. 10th St., and Woodland Rd., Pittsburgh, Pa.
- READ, Carleton A. (1893; 1900), Prof. Steam Engrg., Worcester Poly. Inst., and 15 Hackfeld Rd., Worcester, Mass.
- READ, George Franklin, Jr. (1907; 1910), Asst. Mech. Supt., Clark Thread Co., Clark and Ogden Sts., and *for mail*, 238 Belleville Ave., Newark, N. J.
- REARDON, P. H. (Associate, 1911), Pres. and Genl. Mgr., Compressed Air & Genl. Mchy. Co., 39-51 Stevenson St., and 531 Market St.; also, 415 Fillmore St., San Francisco, Cal.
- REARICK, Chas. B. (1892; 1901), V. P. and Mgr., Conn. Turbine Mfg. Co., and *for mail*, 140 Ocean Ave., New London, Conn.
- REBER, Louis E. (1891), Dean Univ. Extension Div., Univ. of Wis., and 630 Frances St., Madison, Wis.
- RECORD, James L. (1912), Pres. and Genl. Mgr., Minneapolis Steel & Mchy. Co., and *for mail*, 343 Oak Grove St., Minneapolis, Minn.
- REDFIELD, Snowden B. (1910), Engr. of Tests, Ingersoll-Rand Co., Phillipsburg, N. J., and *for mail*, 64 N. 2d St., Easton, Pa.
- REED, Chester Turner (Junior, 1906), Pur. Engr., Reed & Prince Mfg. Co., and *for mail*, 1215 Main St., Worcester, Mass.
- REED, Edgar Howard (Junior, 1905), Supt., Reed & Prince Mfg. Co., Duncan Ave., and *for mail*, Wildwood Ave., Worcester, Mass.
- REED, Fred M. (1906), Mech. Engr., Morse Twist Drill & Mch. Co., New Bedford, Mass.
- REED, Samuel Gorden (Junior, 1896), Pres., Neahkahnne Mountain Land Co., Nehalem, and 299 Vista Ave., Portland, Ore.
- REED, William E. (1898), 71 Broadway, and *for mail*, 175 W. 72d St., New York, N. Y.
- REEDER, Charles L. (1907), Cons. Engr., 917-921 Equitable Bldg., and The Montreal, Baltimore, Md.
- REEDER, Nathaniel S., Jr. (1902; 1907), West. Steel Car & Fdy. Co., 1470 Old Colony Bldg., Chicago, Ill.
- REESE, Dale Fleming (Junior, 1907), Supt. Steam Boiler Dept., Ocean Accident & Guarantee Corp., Ltd., 59 John St., New York, N. Y., and 311 Belleville Ave., Newark, N. J.
- REEVE, Charles D. (1891), Factory Mgr., Grand Rapids Brass Co., 90 Scribner Ave., and 307 Auburn Ave., Grand Rapids, Mich.
- REEVE, Sidney A. (1901), Cons. Engr., 20 Central Ave., Tompkinsville, S. I., N. Y.
- REGAN, Joseph Charles (1911), Supt. Productive Efficiency, Yale & Towne Mfg. Co., and 370 Summer St., Stamford, Conn.
- REGAN, Ralph Howard (Junior, 1911), Asst. Testing Engr., Isthmian Canal Com., Gorgona, Canal Zone, C. A.

- REID, Edward Snover (Junior, 1896), Engr., No. Engrg. Wks., and 70 Pingree Ave., Detroit, Mich.
- REID, John Simpson, Sr. (1898), Asst. Prof. Mech. and Mch. Drawing, Armour Inst. of Tech., and *for mail*, 43 W. 33d St., Chicago, Ill.
- REID, Joseph (1904), Pres., Joseph Reid Gas Eng. Co., Main St., and 21 Orange St., Oil City, Pa.
- REID, Joseph Snively (1911), Secy., Ch. Engr., Clark Bros. Co., Belmont, and Olean, N. Y.
- REID, Marcellus (1903), Mech. and Cons. Engr., 506 Caxton Bldg., and 1865 E. 86th St., N. E., Cleveland, O.
- REID, Robert C. (1907), Mgr. Truck Dept., Harrolds Motor Car Co., 233 W. 54th St., New York, N. Y., and *for mail*, Englewood, N. J.
- REID, Wm. L. (1903), Genl. Wks. Mgr., Am. Loco. Co., and 842 Union St., Schenectady, N. Y.
- REILLY, Wm. J. (1901), Dist. Sales Mgr., The Babcock & Wilcox Co., 435 17th St., and 1219 Milwaukee St., Denver, Colo.
- REIMER, Arthur Adams (1912), Engr. Water Dept., City Hall, and *for mail*, 45 S. Maple Ave., East Orange, N. J.
- REISS, George T. (1890), V. P., Niles Tool Wks., Hamilton, O.
- REIST, H. G. (1889; 1893), Manager, 1909-1912; Mech. Engr., Genl. Elec. Co., and *for mail*, 110 Avon Rd., Schenectady, N. Y.
- RENNER, Roland B. (Junior, 1906), Mech. Engr., Jeffrey Mfg. Co., and *for mail*, 226 Buttles Ave., Columbus, O.
- RENO, Harold P. (Junior, 1907), Sayles' Bleacheries, Saylesville, R. I.
- RENO, Jesse Wilford (1912), Cons. Engr., Otis Elev. Co., 11th Ave. and 26th St., New York, N. Y.
- RENOLD, Charles Garonne (Junior, 1906), Dir., Hans Renold, Ltd., 253 K St., Manchester, and 53 Heaton Rd., Withington, Manchester, England.
- RENTSCHLER, Gordon Sohn (Junior, 1911), V. P. and Fdy. Mgr., The Hamilton Fdy. & Mch. Co., Hamilton, O.
- REPATH, Charles H. (1891), Box 889, Douglas, Ariz.
- REPLOGLE, Mark A. (1898), Sales Engr., The Lombard Governor Co., 1508 Fisher Bldg., Chicago, Ill., and 65 Aqueduct St., Akron, O.
- REUNERT, Theodore (1901), Senior Partner, Reunert & Lenz, Engrs., Box 92, Johannesburg, S. A., and care of Findlay, Durham & Brodie, 110 Cannon St., London, E. C., England.
- REYNOLDS, Frank W. (1912), Member of Firm, Lockwood, Greene & Co., 60 Federal St., Boston, and 13 Everett Ave., Winchester, Mass.
- REYNOLDS, Herbert Byron (Junior, 1912), 706 E. Buffalo St., Ithaca, N. Y.
- REYNOLDS, Irving H. (1896), Allis-Chalmers Co., and *for mail*, 339 Prospect Ave., Milwaukee, Wis.
- REYNOLDS, John P., Jr. (Junior, 1902), Mech. Engr., Dept. of Water Supply, Park Row Bldg., New York, N. Y., and *for mail*, 28 Myrtle Ave., Plainfield, N. J.

- REYNOLDS, Philip Edgar (Junior, 1911), Engr. of Tests Mech. Dept., N. Y. Edison Co., New York, N. Y., and *for mail*, 604 Hudson St., Hoboken, N. J.
- REYNOLDS, Scott (Junior, 1912), Salesman and Engr., Latta-Martin Pump Co., Hickory, and *for mail*, Greensboro, N. C.
- RHOADS, George Elwood (Junior, 1906), Asst. Foreman, Loco. Test Plant, Pa. R. R., and *for mail*, 1320 20th Ave., Altoona, Pa.
- RICE, Alva C. (1890), Cons. Hyd. and Mech. Engr., 5 Oberlin St., Worcester, Mass.
- RICE, Arthur L. (1895; 1902), Managing Editor, The Practical Engineer, Cons. on Power Plant Engrg., 537 S. Dearborn St., Chicago, Ill.
- RICE, Calvin W. (1900), Cons. Engr., Secretary, Am.Soc.M.E., 29 W. 39th St., New York, N. Y., and 241 N. Mountain Ave., Upper Montclair, N. J.
- RICE, Charles De Los (1907), Genl. Supt., Underwood Typewriter Co., 531 Capitol Ave., and 1043 Prospect Ave., Hartford, Conn.
- RICE, George W. (1906; 1912), Supvr. of Inspc., M. Rumely Co., and *for mail*, 808 Michigan Ave., La Porte, Ind.
- RICE, Myron Wesley (Junior, 1911), Am. Engrg. Co., Cumberland St., Philadelphia, Pa., and 50 Houghton St., Worcester, Mass.
- RICE, Richard H. (1890), Manager, 1904-1907; Genl. Elec. Co., and 124 Ocean St., West Lynn, Mass.
- RICH, Edward P. (1911), V. P. and Secy., Neller, Rich & Co., 1409 Manhattan Bldg., and 4541 Woodlawn Ave., Chicago, Ill.
- RICHARDS, Charles B. (1880), Manager, 1880-1882; Vice-President, 1888-1890; Prof. Emeritus Mech. Engrg., Yale Univ., and *for mail*, 227 Edwards St., New Haven, Conn.
- RICHARDS, Chas. Dexter (Junior, 1904), Asst. Engr. of Tests, Solvay Process Co., and *for mail*, 266 Meadowbrook Ave., Detroit, Mich.
- RICHARDS, Charles R. (1890), Dir., Cooper Union, and 175 Second Ave., New York, N. Y.
- RICHARDS, Chas. Russ (1892; 1901), Prof. Mech. Engrg., Charge of Dept., Univ. of Ill., and 1013 W. Nevada St., Urbana, Ill.
- RICHARDS, Francis H. (1880), Life Member; Mech. Engr., Pat. Atty., 9-15 Murray St., New York, N. Y., and *for mail*, 112 Edwards St., Hartford, Conn.
- RICHARDS, Frank (1891), Managing Editor, Compressed Air, and Ingersoll-Rand Co., 11 Broadway, and *for mail*, 229 W. 135th St., New York, N. Y.
- RICHARDS, Thomas Gleason (1912), Pres. and Mgr., B. & R. Rubber Co., and *for mail*, Box A, North Brookfield, Mass.
- RICHARDS, Willard F. (1909), Mech. Supt., Gould Coupler Co., Depew, N. Y.
- RICHARDS, William A. (Junior, 1903), Dir. of Vocational Education, City of Rockford, High Sch. Bldg., Rockford, Ill.
- RICHARDSON, Charles Germane (1911), Sales Engr. Meter Dept., Builders Iron Fdy., and *for mail*, 65 Comstock Ave., Providence, R. I.

- RICHARDSON, Clifford (Associate, 1894), Cons. Engr., 30 Church St., New York, N. Y.
- RICHARDSON, Edward Bridge (1910), Partner, Richardson & Hale, Cons. Engrs., 85 Water St., Boston, and 7 Chatham St., Brookline, Mass.
- RICHARDSON, George Edward (Associate, 1910), Lancaster, Mass.
- RICHARDSON, George Partridge (Junior, 1901), Mech. Engr., Engr. of Constr., Isbell-Porter Co., 46 Bridge St., Newark, and Wyoming, N. J.
- RICHARDSON, Levi S. (1909), Engr. with S. Firestone, Granite Bldg., and *for mail*, 443 Meigs St., Rochester, N. Y.
- RICHARDSON, Thomas (1907), Ch. Draftsman, W. S. Barstow & Co., 50 Pine St., New York, N. Y., and *for mail*, 9 Concord St., South Norwalk, Conn.
- RICHART, Fred W. (1905), Dist. Supt., Central Ill. Public Service Co., Carterville, Ill.
- RICHMOND, Harold A. (Junior, 1898), Pres., Am. Emery Wheel Wks., 325 Waterman St., and *for mail*, 88 Cooke St., Providence, R. I.
- RICHMOND, Julian (1903; Associate, 1908), Asst. Engr., Bd. of Water Supply, 165 Broadway, New York, and Dunwoodie Heights, Yonkers, N. Y.
- RICHMOND, Knight C. (1891; 1908), Cons. Engr., 526 Banigan Bldg., and 41 Cooke St., Providence, R. I.
- RICHTER, Ernst (1890), Mech. Engr., The G. A. Gray Co., Cincinnati, and *for mail*, LaFayette Circle, Clifton, Cincinnati, O.
- RICHTER, Arthur Wm. (Junior, 1892), Univ. of Mont., Missoula, Mont.
- RICKER, Wm. Wood (1906), Treas. and Secy., Guarantee Constr. Co., 140 Cedar St., and 65 Park Ave., New York, N. Y.
- RICKETTS, Edwin Burnley (Junior, 1908), N. Y. Edison Co., 40th St. and 1st Ave., and 1061 Boston Rd., New York, N. Y.
- RICKETTS, Palmer Chamberlaine (1892), Pres. and Prof. Mech., Rensselaer Poly. Inst., Troy, N. Y.
- RICKEY, Walter J. (1903), Wks. Mgr., The Singer Mfg. Co., and 1005 W. Washington Ave., South Bend, Ind.
- RIDDELL, A. H. (1901), Machold & Riddell, 1020 Stephen Girard Bldg., Philadelphia, Pa., and Mountwell Ave., Haddonfield, N. J.
- RIDDELL, John (1895), Mech. Supt., Genl. Elec. Co., Schenectady Wks., and *for mail*, 1138 Duane Ave., Schenectady, N. Y.
- RIDDLE, Howard Sterling (1905), V. P., Weinman Pump Mfg. Co., Columbus, and *for mail*, Route 2, Shepard, O.
- RIDER, Geo. Smith (1900), Cons. Engr., Geo. S. Rider & Co., Century Bldg., and *for mail*, 1808 E. 65th St., Cleveland, O.
- RIDER, Thomas J. (1894), Mech. Engr., Rider-Bagg Co., and 90 Westminster St., Springfield, Mass.
- RIDGELY, William Barret (1880; 1895), Banker and Mfr., 934 Marbridge Bldg., 34th St. and Broadway, New York, N. Y., and *for mail*, 1908 Q St., N. W., Washington, D. C.

- RIEGE, Rudolph (1911), 26 Gramercy Park, New York, N. Y.
- RIESENBERGER, Adam (1890), Registrar and Treas., Stevens Inst. of Tech., Hoboken, and 546 Union Pl., Town of Union, N. J.
- RIGDON, Carl (Junior, 1907), Supt., Light and Power, Chattanooga Ry. & Light Co., 710 Market St., and 904 Bailey Ave., Chattanooga, Tenn.
- RIGGS, John D. (Junior, 1892), Designer, D. Bradley Wks., Sears, Roebuck & Co., and *for mail*, 327 Court St., Kankakee, Ill.
- RIGHTER, Addison A. (1909), Dir. and Mech. Engr., John M. Ewen Co., 573 Rookery Bldg., Chicago, Ill.
- RIKER, Andrew L. (1897; 1899), Manager, 1906-1909; V. P., Locomobile Co. of Am., Bridgeport, and *for mail*, Fairfield, Conn.
- RILEY, Joseph C. (1909), Assoc. Prof. Mech. Engrg., Mass. Inst. of Tech., Boston, and 77 Rockview St., Jamaica Plain, Mass.
- RILEY, R. Sanford (1906), Pres., Sanford Riley Stoker Co., Ltd., 314 Main St., and 228 West St., Worcester, Mass.
- RINK, George William (1907), Mech. Engr. M. P. Dept., Central R. R. of N. J., and *for mail*, 104 Claremont Ave., Jersey City, N. J.
- RIPPEY, S. Howard (1904; 1905), Cons. Engr., Stephen Girard Bldg., Philadelphia, and 610 W. Upsal St., Germantown, Philadelphia, Pa.
- RIPSCH, Charles William (Junior, 1908), Mech. Engr., Recording & Computing Mchs. Co., and *for mail*, 113 Hawthorn St., Dayton, O.
- RITCHIE, Francis P. (Associate, 1908), 237 Villeneuve St., W., Montreal, P. Q., Canada.
- RITES, Francis M. (1891), Mech. Engr., Slaterville Springs, N. Y.
- RITTER, Elmer Ralph (Junior, 1912), Asst. Mech. Engr., The Lunkenheimer Co., Box 876, Cincinnati, O.
- RITTER, Henry (1900), Supt., The Lunkenheimer Co., and 4208 Glenway Ave., Price Hill, Cincinnati, O.
- RIVETT, Edward (1904), Allerton, Mass.
- RIX, Edward Austin (1896), Pres. and Mgr., Rix Compressed Air & Drill Co., 219 Spear St., San Francisco, Cal.
- ROBB, A. G. (1902), Ch. Engr., Internatl. Engrg. Wks., Amherst, N. S., Canada.
- ROBB, D. W. (1888), Pres., Robb Engrg. Co., Ltd., South Framingham, and Wellesley Hills, Mass.
- ROBBINS, C. C. (Associate, 1904), Secy. and Genl. Mgr., The Cleveland Crane & Engrg. Co., Wickliffe, O.
- ROBBINS, John L. (Junior, 1908), Mech. Engr., Robbins, Gamwell & Co., Pittsfield, Mass.
- ROBBINS, Percy Arthur (Associate, 1901), Genl. Mgr., Canadian Min. & Finance Co., Timmins, Ont., Canada.
- ROBERTS, A. L. (1909), Designer and Mech. Engr., Pawling & Harnischfeger Co., and *for mail*, 1424 Cedar St., Milwaukee, Wis.

- ROBERTS, E. P. (1889), Cons. Engr. and Ch. City Smoke Inspr., 1123 Schofield Bldg., Cleveland, and *for mail*, 200 Stanwood Rd. Hill, East Cleveland, O.
- ROBERTS, George J. (1888), First V. P., Pub. Service Corp. of N. J., Pub. Service Corp. Bldg., Newark, N. J.
- ROBERTS, Montague H. (Junior, 1912), Ch. Engr., Am. Loco. Co., and *for mail*, Slade Mansion, 547 Elmwood Ave., Providence, R. I.
- ROBERTS, Percival, Jr. (1888), Vice-President, 1893-1895; 717 Arcade Bldg., Philadelphia, and *for mail*, Narberth, Montgomery Co., Pa.
- ROBERTSON, R. A. (1888), Treas., Providence Engrg. Wks., and *for mail*, 50 Stimson Ave., Providence, R. I.
- ROBESON, Anthony Maurice (1895), "Beauvoir" St. Aubin, Jersey, Channel Islands.
- ROBINSON, A. W. (1883), Manager, 1896-1899; Life Member; Cons. Mech. Engr., 14 Phillips Sq., Montreal, P. Q., Canada.
- ROBINSON, Arthur L. (1908), Supt. Mech. Div., Isthmian Canal Com., Gorgona, Canal Zone, C. A., and Louisville, Ky.
- ROBINSON, C. Snelling (1900), Second V. P., Youngstown Sheet & Tube Co., and *for mail*, 429 Wick Ave., Youngstown, O.
- ROBINSON, Edward (1891; 1902), Prof. Mech. Engrg., Univ. of Vt., and *for mail*, 25 Colchester Ave., Burlington, Vt.
- ROBINSON, Edward P. (1891), Supt., The Atlantic Wks., 80 Border St., East Boston, Mass.
- ROBINSON, Frank H. (1903), Treas., Walter H. Foster Co., 1479 Fulton Bldg., 50 Church St., New York, N. Y.
- ROBINSON, Garland P. (1902; 1909), Asst. Ch. Inspr. Locomotive Boilers, Interstate Commerce Com., and *for mail*, Sherman Apt., Washington, D. C.
- ROBINSON, H. B. (1897), Mech. Engr., Supt. of Shops, Allentown Rolling Mills, and *for mail*, P. O. Box 135, Allentown, Pa.
- ROBINSON, J. Albert M. (Junior, 1912), Hyd. Engr., The Am. Well Wks., 454 First Natl. Bank Bldg., and *for mail*, 6415 Minerva Ave., Chicago, Ill.
- ROBINSON, James R. (1905), Mgr., Scottdale Fdy. & Mch. Co., Scottdale, and *for mail*, Mt. Lebanon, Allegheny Co., Pa.
- ROBINSON, Louis G. (Junior, 1905), Louis G. Robinson Lab., Metallurgy and Ceramics, Harrison Bldg., Cincinnati, O., and *for mail*, 4th and Park Ave., Newport, Ky.
- ROCKWELL, Samuel Forbes (1912), Mfg. Supt., Davis & Furber Mch. Co., North Andover, Mass.
- ROCKWOOD, Geo. I. (1891), Manager, 1903-1906; Life Member; Cons. Engr., 38 Harlon St., and 340 May St., Worcester, Mass.
- ROCKWOOD, George O. (1911), Pres., The Rockwood Mfg. Co., P. O. Box 636, Indianapolis, Ind.
- RODGERS, Horace Philip (Junior, 1912), Mech. Engr., 2099 E. 71st St., Cleveland, O.
- RODGERS, Myron Knox (1904), Min. Engr., 2338 Tenth Ave., N., Seattle, Wash.

- ROE, Joseph W. (1902), Asst. Prof., S. S. S., Yale Univ., and *for mail*, 84 Trumbull St., New Haven, Conn.
- ROE, Mark W. (1900; 1909), Mech. Engr., Diamond Rubber Co., and *for mail*, 11 Nella Ave., Akron, O.
- ROE, Walter E. (1902), Ch. Draftsman, Dodge Mfg. Co., and 109 E. 4th St., Mishawaka, Ind.
- ROELKER, Carl J. (1909), Cons. Engr., Roelker & Lee, State Bank Bldg., Richmond, Va.
- ROELKER, H. B. (1889), Mech. Engr., 41 Maiden Lane, and 43 W. 97th St., New York, N. Y.
- ROESLER, Dr. Rudolf (Junior, 1910), Cons. Engr., 25 Broad St., New York, N. Y., and *for mail*, 2 Haberlandstr., Berlin, Germany.
- ROGERS, Charles Edward (Associate, 1898), Genl. Mgr., Fraser & Chalmers, Ltd., Corner House, and The Pines, Gordon Hill Rd., Parktown, Johannesburg, S. A.
- ROGERS, Edwin Allan (Junior, 1911), Asst. in Steam Operation and Maintenance Dept., Pacific Gas & Elec. Co., 445 Sutter St., and *for mail*, 1439 Willard St., San Francisco, Cal.
- ROGERS, Fred. E. (Associate, 1907), Editor, Machinery, and Railway Machinery, 49-55 Lafayette St., New York, N. Y., and *for mail*, 6 Garfield Pl., East Orange, N. J.
- ROGERS, John I. (Junior, 1910), Eagan-Rogers Steel & Iron Co., Crum Lynne, Pa.
- ROGERS, Lewis C. (1912), Exper. Engr., The Solvay Process Co., Detroit, Mich.
- ROGERS, Robert Fletcher (1912), Pat. Lawyer, 45 Broadway, New York, N. Y.
- ROGERS, Robert W. (Junior, 1908), Practical and Tech. Instr. of Apprentices, Erie R. R. Shop, and *for mail*, 25 Ferguson Ave., Port Jervis, N. Y.
- ROGERS, Winfield S. (1888), Pres., Bantam Anti-Friction Co., Bantam, Conn.
- ROHLIG, Georg Gustav (1909), Dir. and Genl. Supt., Botany Worsted Mills, and *for mail*, 145 Dayton Ave., Passaic, N. J.
- ROHRER, Albert L. (1896), Elec. Supt., Genl. Elec. Co., and *for mail*, Lenox Rd., Schenectady, N. Y.
- ROLLINS, William Benjamin (1911), Cons. Engr., Rollins & Westover, 420 Midland Bldg., res., 2434 Wabash Ave., Kansas City, Mo.
- RONEY, Wm. R. (1889), Pres., Securities & Constr. Co. of Am., 15 William St., and 118 W. 81st St., New York, N. Y.
- ROONEY, Martin Aloysius (Junior, 1912), Engr., Marathon Motor Wks., Clinton St. and 12th Ave., N., and *for mail*, 219 14th Ave., N.; also, 1510 Demombreun St., Nashville, Tenn.
- ROOT, Orlando J. (1898), Moline Auto. Co., Inc., 1518 W. Washington St., Los Angeles, Cal.
- ROPER, Norman Brownell (1905), Mech. Supt., Cerro de Pasco Min. Co., La Fundicion, Peru, S. A., and 320 W. 6th St., Santa Ana, Cal.

- ROSE, E. Ernest (Junior, 1900), Engr., Westinghouse Elec. & Mfg. Co., East Pittsburgh, and *for mail*, 2012 Hampton Ave., Swissvale, Pa.
- ROSE, Harry Mulford (1896), 279 N. Broad St., Elizabeth, N. J.
- ROSE, John H. (Associate, 1907), Secy. and Genl. Mgr., Bradford Elec. Light & Power Co., Bradford, Pa.
- ROSING, William H. V. (1896), Asst. to V. P., St. L. & S. F. R. R., Frisco Bldg., and *for mail*, 4130 McPherson Ave., St. Louis, Mo.
- ROSS, Charles Everett (1900), Cons. Engr., 52 Beaver St., and *for mail*, Hotel Chelsea, W. 23d St., New York, N. Y.
- ROSS, Sir Charles Henry A. F. L. (1910), Pres., Ross Rifle Co., Quebec, Canada.
- ROSS, John L. (1912), Prop., Ross & Young Mch. Co., Detroit, Mich.
- ROSS, Phillip Lawrence (Junior, 1910), Mech. Engr., Gunn, Richards & Co., 43 Exchange Pl., New York, N. Y.
- ROSS, Taylor W. (Junior, 1895), Supt. Repairs and Docks, Newport News Shipbuilding & Dry Dock Co., and *for mail*, 3112 West Ave., Newport News, Va.
- ROSSBERG, Chas. Andrew (Junior, 1903), Ch. Draftsman, Veeder Mfg. Co., and *for mail*, 127 Oakland Terrace, Hartford, Conn.
- ROSSMAN, James R., Jr. (Junior, 1910), Ch. Engr., Steel Cable Engrg. Co., and *for mail*, 776 Beacon St., Boston, Mass.
- ROTE, John G. (Junior, 1911), 3 Dana St., Cambridge, Mass.
- ROTTER, Max (1899), Ch. Engr., Busch-Sulzer Bros.-Diesel Eng. Co., South Side Bank Bldg., St. Louis, Mo.
- ROUX, Paul (Associate, 1890), 9 rue des Bluets, Paris, France.
- ROWBOTTOM, George (1909), Pres., Rowbottom Mch. Co., and 233 Willow St., Waterbury, Conn.
- ROWE, Don Ray (Junior, 1911), Ch. Draftsman, The Noyes Mfg. Co., cor. 5th and Norwood Ave., and 365 Edgewood Ave., Dayton View, Dayton, O.
- ROWE, George F. (1908), Mech. Engr., Bangor, Me.
- ROWELL, Henry K. (1911), Industrial Engr., Prin. Asst. Charge Organization Dept., Chas. T. Main, Boston, and *for mail*, 135 Dale St., Waltham, Mass.
- ROWLAND, Charles Bradley (1885; 1894), V. P., The Continental Iron Wks., Greenpoint, Brooklyn, N. Y.
- ROWLAND, Thomas F., Jr. (1884), Pres., The Continental Iron Wks., West and Cayler Sts., Brooklyn, N. Y.
- ROWLEY, Frank B. (Junior, 1911), Instr. Engrg. Drawing and Descriptive Geometry, Univ. of Minn., and *for mail*, 217 Beacon St., S. E., Minneapolis, Minn.
- ROWLEY, Harry William (1896), Mech. Engr., Borough Development Co., 186 Remsen St., Brooklyn, N. Y.
- ROWLEY, Ridgway Lloyd (Junior, 1910), Inspec. Engr., Bd. of Fire Underwriters of the Pacific, 914 Merchants Exch., San Francisco, and 398 60th St., Oakland, Cal.

- ROWNTREE, Bernard (Associate, 1911), East. Mgr., Burdett-Rowntree Mfg. Co., Rm. 1774, 50 Church St., New York, N. Y., and The Rowans, Oradell, N. J.
- ROWSE, William Crapo (Junior, 1912), Instr. Steam and Gas Engrg., Univ. of Wis., and 2218 W. Lawn Ave., Madison, Wis.
- ROYLE, Vernon (1907), Pres. and Treas., John Royle & Sons, and *for mail*, 618 E. 28th St., Paterson, N. J.
- ROYLE, Vernon Elmer (Junior, 1905), Mech. Engr., John Royle & Sons, and *for mail*, 399 15th Ave., Paterson, N. J.
- ROYS, Lawrence (Junior, 1907), Supt. Outside Constr., Bucyrus Co., South Milwaukee, Wis.
- ROYSE, Daniel (1891; 1904), Asst. to Dir. of Purchases, Union Pacific R. R., 165 Broadway, New York, N. Y.
- RUCKER, B. Parks (1909), Cons. Engr., Commercial Bank Bldg., and 515 N. Church St., Charlotte, N. C.
- RUCKES, Joseph J., Jr. (1902; 1911), Efficiency Engr., Barrett Mfg. Co., 17 Battery Pl., and *for mail*, 1336 Bristow St., New York, N. Y.
- RUDDY, William (Junior, 1911), Ruddy & Howe, 150 Nassau St., New York, N. Y.
- RUGAN, Henry Fisler (1900), Assoc. Prof. Mech. Arts, Tulane Univ. of La., and 1309 State St., New Orleans, La.
- RUGGLES, Wm. Barker (1905), Pres., Ruggles-Coles Engrg. Co., 50 Church St., New York, N. Y., and 91 W. 5th St., Bayonne, N. J.
- RUMELY, William N. (1885), Pres., Rumely-Wachs Mchy. Co., 121 N. Jefferson St., Chicago, Ill.
- RUMSEY, Spencer S. (1900; 1907), Ch. Engr., Oliver Iron Min. Co., 713 Wolvin Bldg., and 217 S. 19th Ave., E., Duluth, Minn.
- RUNYON, Frederick O. (1909), Cons. Engr., 122 Market St., Newark, and 9 Hickory Drive, Maplewood, N. J.
- RUPE, Ernest L. (Junior, 1907), Mech. Expt., Russell, Burdsall & Ward Bolt & Nut Co., and *for mail*, 15 Monroe Pl., Port Chester, N. Y.
- RUPP, M. E. (Junior, 1909), Inspec. Engr. East. Div., Isthmian Canal Com., care of Am. Bridge Co., Pencoyd, and 166 Kalos St., Wissahickon, Pa.
- RUPPEL, Richard (Junior, 1912), Mech. Engr., Griggs & Holbrook, 3 S. William St., New York, N. Y.
- RUSBATCH, Alfred (1901), Supt., Rod Mills, 1786 E. 89th St., Cleveland, O.
- RUSBY, John M. (1893), Engr. of Tests, United Gas Improvement Co., Broad and Arch Sts., and The Avondale, 39th and Locust Sts., Philadelphia, Pa.
- RUSHMORE, David Barker (1897; 1903), Ch. Engr. Power and Min. Dept., Genl. Elec. Co., and 234 Union St., Schenectady, N. Y.
- RUSSEL, Walter S. (1887), Manager, 1893-1896; Vice-President, 1897-1899; Life Member; Pres. and Genl. Mgr., Russel Wheel & Fdy. Co., Chene St. and Belt Line R. R., Detroit, Mich.

- RUSSELL, Foster (Junior, 1911), Agt. Commer. Dept., Wash. Water Power Co., and *for mail*, 2702 E. 8th Ave., Spokane, Wash.
- RUSSELL, Walter B. (1906; 1909), Dir., Franklin Union, Boston, and *for mail*, 58 Arborway, Jamaica Plain, Boston, Mass.
- RUST, Robt. R. (1912), Engr. in Charge of Operation, also Asst. Secy., The Central Fdy. Co., and *for mail*, 310 W. 97th St., New York, N. Y.
- RUST, William F. (1904), Ch. Engr., Youngstown Sheet & Tube Co., and 67 Broadway, Youngstown, O.
- RUTH, Wilbur M. (1886), Fombell, Beaver Co., Pa.
- RUTHERFORD, Eugene W. (1904; 1911), Mech. Engr. and Asst. to Genl. Mgr., U. S. Rubber Co., 42 Broadway, New York, and *for mail*, 231 Jefferson Ave., Brooklyn, N. Y.
- RUTHERFORD, G. S. (1901; 1907), Genl. Mgr., Kan. Chem. Mfg. Co., and 501 A St., E., Hutchinson, Kan.
- RUUD, Edwin (1889), Pres., The Ruud Mfg. Co., 29th and Smallman Sts., and 4735 Maripoe Ave., Pittsburgh, Pa.
- RYAN, William John (Junior, 1912), Asst. Mech. Engr., Pa. Coal & Coke Corp., 17 Battery Pl., and *for mail*, 202 Riverside Drive, New York, N. Y.
- RYDER, Malcolm P. (Associate, 1901), Engr., Witherbee Igniter Co., Birnie Ave. and Arch St., and 86 Calhoun St., Springfield, Mass.
- RYDING, Herbert Charles (1900), Asst. to V. P., Tenn. Coal, Iron & R. R. Co., and 1400 S. 19th St., Birmingham, Ala.
- RYERSON, William N. (1906), Genl. Mgr., Great No. Power Co., Duluth, Minn.
- ST. CLAIR, James Thorpe (Junior, 1901), Pres., Wesley Mfg. Co., 314 S. 8th St., St. Louis, Mo.
- SABIN, Alvah Horton (1896), Cons. Chem., Natl. Lead Co., 129 York St., Brooklyn, and *for mail*, 432 Sanford Ave., Flushing, L. I., N. Y.
- SACHS, Joseph (1911), V. P. and Genl. Mgr., The Sachs Laboratories, Inc., 103-105 Allyn St., Hartford, Conn.
- SAEGMULLER, George Nicholas (1911), Mech. Engr., Mfr., V. P., Bausch & Lomb Optical Co., and *for mail*, 1100 St. Paul St., Rochester, N. Y.
- SAFFORD, Arthur Truman (1904), Asst. Engr., Locks and Canals, Cons. Hyd. Engr., 66 Broadway, and 30 Talbot St., Lowell, Mass.
- SAGUE, James Edward (1887), Commissioner, Pub. Service Com., Second Dist., Albany, and Cliffdale, R. D. 2, Poughkeepsie, N. Y.
- SAGUE, Samuel Reston (Junior, 1908), Sales Engr. Power House Equip., Strong, Carlisle & Hammond Co., Cleveland, and *for mail*, 58 Idlewood St., East Cleveland, O.
- SAHLIN, Axel (1893), Res. Dir., Julian Kennedy, Sahlin & Co., Ltd., 52 Rue de Congrès, and 72 Ave. Michel Ange, Brussels, Belgium.

- SAKATA, S. (1891), Prof. Mech. Engr., Tokio Tech. College, Asakusa, Tokio, and *for mail*, 24 Nakacho Ushigome, Tokio, Japan.
- SALDANA, Eduardo E. (Associate, 1903), Mech. and Ch. Engr., Central "Monserrate," Manati, and *for mail*, P. O. Box 906, San Juan, also Santurce, Porto Rico.
- SALMON, Frederick Wm. (1900; 1904), Civ. and Mech. Engr., 23 Cecil St., Walkerville, Ont., Canada, and care of Louis E. Salmon, 96 Warren Ave., Pawtucket, R. I.
- SALTZMAN, Auguste L. (1908), Supt. Primary Battery Dept., Thomas A. Edison, Inc., Silver Lake, and *for mail*, 53 Wilcox Ave., East Orange, N. J.
- SAMMIS, Norman Lewis (Junior, 1912), Rep., Builders Iron Fdy., Philadelphia, and *for mail*, The Wood Norton, Germantown, Philadelphia, Pa.
- SAMMONS, E. A. (1900), Pres. and Treas., E. A. Sammons Co., Ltd., 303-307 Magazine St., and 1619 Jackson Ave., New Orleans, La.
- SAMPSON, Chas. C. (1909), Mech. Engr., Gas Engr., Ill. Steel Co., Joliet Wks., and *for mail*, 214 Glenwood Ave., Joliet, Ill.
- SAMPSON, George T. (Associate, 1912), Ch. Engr., Ansonia Mfg. Co., and *for mail*, 119 Beaver St., Ansonia, Conn.; also, 83 S. 5th St., Brooklyn, N. Y.
- SANBORN, Francis Noel (Junior, 1895), Mech. Engr., 47 Brevoort Pl., Brooklyn, N. Y.
- SANBORN, Frank Edwin (1904), Prof. Industrial Arts, Ohio State Univ., and 90 E. 14th St., Columbus, O.
- SANDERS, Newell (1888), Manager, 1902-1905; Prop., Newell Sanders Plow Co., Chattanooga, Tenn.
- SANDERSON, Edwin N. (1903), Sanderson & Porter, 52 William St., and 131 Riverside Drive, New York, N. Y.
- SANDERSON, E. S. (1895; 1903), care of Scovill Mfg. Co., and *for mail*, 155 Buckingham St., Waterbury, Conn.
- SANDERSON, Orrin W. (Junior, 1912), 905 Walnut Ave., Syracuse, N. Y.
- SANDO, Will J. (1899), Manager, 1908-1911; Cons. Engr., Milwaukee Club, Milwaukee, Wis.
- SANFORD, George Ruggles (1910), Chem. Engr. and Supt. Coke Oven Dept., The Solvay Process Co., and Solvay Club House, Syracuse, N. Y.
- SANFORD, Warren Bixby (1912), Head of Mfg. Branch, West Elec. Co., 463 West St., and *for mail*, 139 W. 11th St., New York, N. Y.
- SANGSTER, Andrew (1900; 1908), Supt., Canadian Rand Co., Ltd., and *for mail*, 84 Drummond St., Sherbrooke, P. Q., Canada.
- SANGSTER, William (1894), Supt., Covington Mch. Co., Covington, Va.
- SANGUINETTI, Philip C. (Associate, 1909), Production Engrg. Dept., Marwick, Mitchell & Co., 79 Wall St., and 875 Hunts Point Ave., New York, N. Y.

- SANKEY, H. Riall (1911), Cons. Engr. and Dir., Marconi Wireless Telegraph Co., Ltd., and *for mail*, 7 Charlbury Grove, Ealing, W., England.
- SARENGAPANI, T. S. (Junior, 1903), Head Draftsman, Pub. Wks. Dept., Madura, Madras, India.
- SARGENT, Chas. E. (1891), Mech. Engr., 2226 N. Meridian St., Indianapolis, Ind.
- SARGENT, Fitz-William (1893), Ch. Engr., Am. Brake Shoe & Fdy. Co., Box 15, Mahwah, Bergen Co., N. J.
- SARGENT, Frederick (1901), Mech. Engr., Sargent & Lundy, Ry. Exch., Chicago, res., Harbor St., Glencoe, Cook Co., Ill.
- SARGENT, Henry Bradford (1898), Sargent & Co., and *for mail*, 247 Church St., New Haven, Conn.
- SARGENT, John W. (1886), Providence Engrg. Wks., 521 S. Main St., and *for mail*, 303 Benefit St., Providence, R. I.
- SARGENT, William Durham (1896), Chairman Bd. of Directors, Reading-Bayonne Steel Casting Co., 30 Church St., New York, N. Y., and Hutton Park, West Orange, N. J.
- SARGENT, Wm. Prescott (1909), Pres., Mailing Device Co., Ltd., 1225 Spring Garden St., Philadelphia, and 604 66th Ave., Oak Lane, Philadelphia, Pa.
- SAR VANT, Wilbur N. (Junior, 1907), Asst. Engr., Am. Process Co., 68 William St., New York, and *for mail*, 1324 Dean St., Brooklyn, N. Y.
- SATHERBERG, Carl Hugo (1893), Ch. Engr., Midvale Steel Co., Nicetown, and 1752 N. 26th St., Philadelphia, Pa.
- SATTERFIELD, Howard E. (1908; 1910), Prof. Mech. Engrg., N. C. College of Agri. and Mech. Arts, West Raleigh, N. C.
- SAUNDERS, A. M. (1898), Supt., Natl. Tube Co., and 1416 Library Ave., McKeesport, Pa.
- SAUNDERS, William Lawrence (1906), Pres., Ingersoll-Rand Co., 11 Broadway, New York, N. Y., and 112 Rockview Ave., Plainfield, N. J.
- SAWDON, Will Miller (1910), Asst. Prof. Exper. Engrg., Cornell Univ., and 1018 E. State St., Ithaca, N. Y.
- SAWFORD, Frank (1909), Elec. Engr., Canadian Collieries (Dunsmuir), Ltd., and 1546 Bank St., Victoria, B. C., Canada.
- SAWYER, Harry (1896), Cons. Engr., Shaw Elec. Crane Co., and *for mail*, 6 Ransom St., Muskegon, Mich.
- SAWYER, Luke Eugene (Junior, 1911), Apprentice, Babcock & Wilcox Co., and *for mail*, 137 Broadway, Bayonne, N. J.
- SAXON, William (1906), V. P. and Wks. Mgr., Miehle Ptg. Press & Mfg. Co., Chicago, and *for mail*, 117 Maple Ave., Oak Park, Ill.
- SAYER, Eugene Young (1910), 60 Wall St., and 258 Riverside Drive, New York, N. Y.
- SAYERS, William W. (1901; 1906), Engr., Link Belt Co., 39th St. and Stewart Ave., and *for mail*, 4002 Lake Ave., Chicago, Ill.
- SAYRE, William Heysham (1911), Pres., Am. Abrasive Metals Co., 50 Church St., New York, N. Y., and Glen Ridge, N. J.

- SCARBOROUGH, Francis Winthrop (1905), Secy., Treas. and Genl. Mgr., Scarborough & Howell, 723 E. Main St., Richmond, Va.
- SCHAAKE, William (Junior, 1898), Engr. Ry. Engrg. Dept., Westinghouse Elec. & Mfg. Co., Pittsburgh, Pa.
- SCHADEK, Edward William (1912), Ch. Engr., The Ruemmeli-Dawley Mfg. Co., 3900 Chouteau Ave., and 4057 Flad Ave., St. Louis, Mo.
- SCHAEFER, Frederick Rullman (Junior, 1911), Dist. Sales Mgr., Taylor-Wharton Iron & Steel Co., 100 Broadway, and 1 Gramercy Park, New York, N. Y.
- SCHAEFER, John V. (Junior, 1891), Pres., Schaefer Mfg. Co., Birmingham, Ala.
- SCHAEFFER, Simon S. (Junior, 1904), Mech. Engr., Thompson-Starrett Co., 51 Wall St., and *for mail*, 710 W. 179th St., New York, N. Y.
- SCHAEFFLER, Joseph C. (1900; 1904; 1907), Arch. and Engr., 38-40 W. 32d St., and 151 W. 91st St., New York, N. Y.
- SCHAKEL, Jacob Daniel (Associate, 1907), Mech. Engr., Otis Elev. Co., Box 156, and 141 French St., Buffalo, N. Y.
- SCHALLER, Alwin Louis (Junior, 1911), Supt., McEwen Bros., and *for mail*, 29 Jefferson St., Wellsville, N. Y.
- SCHAUM, Otto W. (1894), Pres., Schaum & Uhlinger, Inc., Mfrs. of Textile Mchy., and Pres., Atlas Ball Co., Glenwood Ave. and 2d St., and *for mail*, 1508 W. Allegheny Ave., Philadelphia, Pa.
- SHEEL, Henry V. R. (Junior, 1909), Brighton Mills, and *for mail*, Rosemawr, Passaic, N. J.
- SHEEL, John M. B. (Junior, 1900), 1479 Fulton Bldg., 50 Church St., New York, N. Y.
- SCHIEFFLER, Frederick A. (1883), Babcock & Wilcox Co., 85 Liberty St., New York, N. Y., and *for mail*, 293 Ridgewood Ave., Glen Ridge, N. J.
- SCHENCK, Charles (Junior, 1902), Supt., Elev. Supply & Repair Co., 561 Monroe St., Chicago, and 146 N. Taylor Ave., Oak Park, Ill.
- SCHENCK, Leon H. (Junior, 1903), 1379 Union St., Schenectady, N. Y.
- SCHERR, Frederick, Jr. (Associate, 1907), Asst. Engr., Fajardo Sugar Co., Fajardo, Porto Rico.
- SCHIEFER, Fred William (Junior, 1911), Mgr. Buffalo Office, Syracuse Supply Co., 622 Ellicott Sq., and *for mail*, 60 W. Parade Ave., Buffalo, N. Y.
- SCHILDHAUER, Edward (1911), Elec. and Mech. Engr., Isthmian Canal Com., Culebra, Canal Zone.
- SCHLACHTER, Carl H. (1906), Supt. Engr., Botany Worsted Mills, and *for mail*, 266 Harrison St., Passaic, N. J.
- SCHLACKS, W. J. (1909), McCord & Co., Peoples Gas Bldg., and 5227 Kenmore Ave., Chicago, Ill.
- SCHLATTER, Rudolf (1910), Asst. to Ch. Engr., Busch-Sulzer Bros. Diesel Eng. Co., St. Louis, Mo.

- SCHLESINGER, Georg (1905), Prof. Engrg., Tech. Hochschule, Charlottenburg, 2, Berlinerstr. 171, Germany.
- SCHMID, Albert (1890), Dir. and Cons. Engr., Société Anonyme Westinghouse, and *for mail*, 6, Place Frédéric-Sauvage, Sainte-Adresse, Le Havre, France.
- SCHMIDT, Charles R. (1895), 200 E. 24th St., Baltimore, Md.
- SCHMIDT, Edward C. (1908), Prof. Ry. Engrg., Univ. of Ill., and *for mail*, 903 W. California Ave., Urbana, Ill.
- SCHMIDT, Ferdinand L. (1912), Mch. Mfr., 150 Eleventh Ave., New York, N. Y.
- SCHMIDT, Wilhelm Armine (1912), Ch. Tool Designer, Remington Typewriter Wks., and *for mail*, 7 Bellevue Ave., Ilion, N. Y.
- SCHNEBLE, Rudolph G. (1897), Cons. Mech. Engr., 1627 E. 3d St., Dayton, O.
- SCHNELLER, Geo. Otto (Associate, 1905), Treas., Ansonia O. & C. Co., Ansonia, Conn.
- SCHNUCK, Edward F. (1897; 1901), Production Engr. and Treas., Jabez Burns & Sons, 600 W. 43d St., New York, N. Y.
- SCHOEN, August (1912), Mech. Engr. Charge Engrg. Dept., Larrowe Constr. Co., and *for mail*, 537 Third Ave., Detroit, Mich.
- SCHOENBORN, W. E. (Junior, 1891), Solicitor of Patents, Expt. in Pat. Causes, McGill Bldg., 908-912 G St., N. W., and 1359 Harvard St., Columbia Hgts., Washington, D. C.
- SCHOENIJAHN, Robert P. (Junior, 1910), Mech. and Elec. Engr., L. B. Marks & J. E. Woodwell, Cons. Engrs., 103 Park Ave., New York, and *for mail*, 426 Sterling Pl., Brooklyn, N. Y.
- SCHOFF, George C. (1894), Rep., Babcock & Wilcox Co., 1010 North Am. Bldg., and 4205 Pine St., Philadelphia, Pa.
- SCHOLL, Julian (1889; 1900), Mech. Engr. and Mfr. Road-Making Mchy., 126 Liberty St., New York, N. Y.
- SCHOOLFIELD, Frank R. (1907), Ch. Draftsman, Ford, Bacon & Davis, New York, and *for mail*, 376 St. John's Pl., Brooklyn, N. Y.
- SCHOTT, Dr. Otto (1912), Cons. Engr. and Tech. Chem., Fifth Ave. Bldg., New York, N. Y.
- SCHREUDER, Andrew M. (1898; 1909), Supt., Philadelphia Textile Mchy. Co., Hancock and Somerset Sts., Philadelphia, and *for mail*, 5351 Wayne Ave., Germantown, Philadelphia, Pa.
- SCHUETZ, Frederick F. (Junior, 1903), Solicitor of Patents and Mech. Engr., Hudson Terminal Bldg., 50 Church St., New York, N. Y., and 65 Hedden Terrace, Newark, N. J.
- SCHUHMANN, George (1884), V. P. and Genl. Mgr., Reading Iron Co., and *for mail*, 1032 Penn St., Reading, Pa.
- SCHULZE-PILLOT, Gerhard (1903), Prof. Mech. Engrg., Royal Tech. Univ., and 8 Taubenweg, Danzig-Langfuhr, Germany.
- SCHUMAKER, John Stauble (Associate, 1905), Ch. Engr. and Mech. Supt., S. D. Warren & Co., and *for mail*, 153 Forest St., Cumberland Mills, Me.

- SCHWAB, Charles M. (1899), Pres., Bethlehem Steel Co., 111 Broadway, and Riverside Drive, New York, N. Y., and South Bethlehem, Pa.
- SCHWAB, Gustav (Junior, 1912), Heven b/Witten a/d, Hauptstr. 62, Ruhr, Germany.
- SCHWAMB, Peter (1884), Treas., Theodore Schwamb Co., 1171 Massachusetts Ave., and *for mail*, 33 Academy St., Arlington, Mass.
- SCHWANHAUSSER, William (1888), Ch. Engr., Internatl. Steam Pump Co., 115 Broadway, New York, and *for mail*, 387 Sterling Pl., Brooklyn, N. Y.
- SCHWARTZ, Carl (1906), First Asst. Engr., N. Y. C. & H. R. R. Co., 5048 Grand Central Terminal, New York, and 9 Siwanoy Ave., New Rochelle, N. Y.
- SCHWARTZ, Harry Adolph (Junior, 1907), Asst. Supt., The Natl. Malleable Castings Co., and *for mail*, 542 Tibbs Ave., Indianapolis, Ind.
- SCHWARZ, Franz H. (Junior, 1888), Mech. Engr., Lower Pacific Mills, and *for mail*, 167 Ferry St., Lawrence, Mass.
- SCIPIO, Lynn A. (1912), Robert College, Constantinople, Turkey.
- SCOLLAN, John Joseph (1910), Genl. Supt., Canada Fdy. Co., Ltd., and 74 Roncesvalles Ave., Toronto, Ont., Canada.
- SCOTT, Dr. Arthur Curtis (1908), Cons. Engr., Pres., Scott Cons. Engrg. Co., 632 Wilson Bldg., and 1420 Sanger Ave., Dallas, Tex.
- SCOTT, Charles Felton (1911), Prof. Elec. Engrg., S. S. S., Yale Univ., and *for mail*, 284 Orange St., New Haven, Conn.
- SCOTT, Clarence N. (1902), Cons. Engr., 1102 Carter Bldg., Houston, Tex.
- SCOTT, Earl Francis (1904; 1906), Mech. Engr. in Charge Engrg. Dept., Atlanta Office, Genl. Fire Extinguisher Co., 276 Marietta St., Atlanta, Ga.
- SCOTT, Geo. H. (1893), Mech. Engr., 30 Channing St., Worcester, Mass.
- SCOTT, Henry Francis (1907), M. M., Dennison Mfg. Co., and 71 Union Ave., South Framingham, Mass.
- SCOTT, J. Alvah (1900), Ossining-on-Hudson, N. Y.
- SCOTT, J. W. (1907), Supt., Arbuckle Bros., foot of Jay St., Brooklyn, N. Y., and Van Nostrand Ave., Englewood, N. J.
- SCOTT, James B. (1896; 1900), Cons. Engr., 800 Continental Trust Bldg., and 2011 Bolton St., Baltimore, Md.
- SCOTT, Olin (1883), Prop., Bennington Mch. Wks., Bennington, Vt.
- SCOTT, Seaton M. (1896; 1897), Engr., 55 Hawthorne St., Brooklyn, N. Y.
- SCOTT, Walter G. (Junior, 1909), Wheeling Mold & Fdy. Co., and *for mail*, Box 273, Wheeling, W. Va.
- SCRIBNER, Charles W. (1889), Mech. Engr., Park Ave., Plainfield, N. J.
- SCRIVENOR, Arthur (1901), Cons. and Contr. Engr., Mut. Bldg., and 1002 West Ave., Richmond, Va.

- SCUDDER, Hewlett, Jr. (Junior, 1899), Pat. Dept., Genl. Elec. Co., Schenectady, N. Y.
- SEABURY, Dwight (1906), Arch. and Engr., 12 East Ave., Pawtucket, and 72 Moore St., Providence, R. I.
- SEAGER, James B. (1908), Genl. Mgr., Seager Eng. Wks., Lansing, Mich.
- SEAMAN, Edwin H. (Junior, 1908), Ins. Engr. with Underwriters at Am. Lloyds, 123 William St., New York, and *for mail*, Lock Box 6, Wantagh, Nassau Co., N. Y.
- SEAMAN, Henry B. (1896), Life Member; Cons. Engr., 165 Broadway, New York, and 135 St. James Pl., Brooklyn, N. Y.
- SEARCH, Charles Edwin (1906), Mgr. of Wks., Allis-Chalmers Co., West Allis, and *for mail*, 529 Walker St., Milwaukee, Wis.
- SEARLE, Wilbur C. (Junior, 1909), Heald Mch. Co., and *for mail*, 578 Pleasant St., Worcester, Mass.
- SEARS, Frank M. (Associate, 1910), Treas. and Mgr., Holyoke Steam Boiler Wks., Holyoke, Mass.
- SEARS, Willard T. (1889; 1904), Engr. of Mfg. Com., Pratt & Whitney Co., and 119 Capitol Ave., Hartford, Conn.
- SEAWELL, Bert W. (1907; 1912), Supt., Chas. Meads & Co., 165 Broadway, New York, and *for mail*, 186 State St., Brooklyn, N. Y.
- SEDERHOLM, E. T. (1889), Asst. Ch. Engr., Nordberg Mfg. Co., and 405 Logan Ave., Milwaukee, Wis.
- SEDGWICK, E. H. (Junior, 1899), Pur. Agt., Brighton Mills, and *for mail*, 122 Franklin Ave., Passaic, N. J.
- SEDGWICK, Edw. V. (1907), Mgr. Exper. Dept., Galena-Signal Oil Co., Franklin, Pa.
- SEE, Alonzo B. (1909), A. B. See Elec. Elev. Co., 220 Broadway, New York, and 7 Monroe Pl., Brooklyn, N. Y.
- SEE, James W. (1880), Mech. Engr., Rentschler Bldg., Hamilton, O.
- SEEM, Charles B. (Junior, 1911), Designing Draftsman, Eng. Dept., Bethlehem Steel Co., South Bethlehem, and *for mail*, 419 Elm St., Emans, Lehigh Co., Pa.
- SELLERS, Coleman, Jr. (1882), Manager, 1890-1893; Pres. and Engr., Wm. Sellers & Co., Inc., 1600 Hamilton St., Philadelphia, Pa.
- SELLEW, Ernest B. (Associate, 1907), Pres. and Mgr., Sellew Mch. Tool Co., Pawtucket, R. I.
- SELSER, Thomas Watson (Junior, 1911), Mech. Engr. with Geo. Mitchell of Durango Sinaloa Mines Co., and *for mail*, 5215 S. Figueroa St., Los Angeles, Cal.
- SERGEANT, Chas. H. (1895), 1818 Webster Ave., New York, N. Y.
- SERRELL, Harold (Associate, 1904), Fulton Bldg., 87 Nassau St., New York, N. Y., and 36 Myrtle Ave., Plainfield, N. J.
- SERRELL, John A. (1895), 71 Murray St., New York, N. Y., and 81 Myrtle Ave., Plainfield, N. J.

- SESSIONS, Edson O. (1911), Member of Firm Woodmansee, Davidson & Sessions, 1048 First Natl. Bank Bldg., and *for mail*, 5022 Sheridan Rd., Chicago, Ill.
- SESSIONS, Frank Lord (1910), Genl. Supt., The Stand. Welding Co., Cleveland, O.
- SETHMAN, George H. (Junior, 1899), Mech. and Elec. Engr., 250 Equitable Bldg., and *for mail*, 647 Williams St., Denver, Colo.
- SETZ, Hans Rudolph (1912), Ch. Engr., Fulton Iron Wks., St. Louis, Mo.
- SEWALL, M. W. (1899), Babcock & Wilcox Co., 85 Liberty St., and 600 W. 144th St., New York, N. Y.
- SEWARD, Herbert Lee (Junior, 1912), Instr. Mech. Engrg., S.S.S., Yale Univ., and *for mail*, 106 Mansfield St., New Haven, Conn.
- SEWELL, J. G. Clifton (Junior, 1892), United Engrg. & Fdy. Co., Farmers Bank Bldg., Pittsburgh, and *for mail*, 15 Hawthorne Ave., Crafton, Pa.
- SEYMOUR, Dudley S. (1905), Supt., Union Spec. Mch. Co., 300 W. Kinzie St., Chicago, and *for mail*, 228 N. Elmwood Ave., Oak Park, Ill.
- SEYMOUR, James Alward (1892), Pres., McIntosh & Seymour Co., and *for mail*, 64 South St., Auburn, N. Y.
- SEYMOUR, Joseph W. (Junior, 1891), Mgr. Boston Office, The C. & G. Cooper Co., 201 Devonshire St., Boston, Mass., and *for mail*, 29 Arnold Ave., Edgewood, R. I.
- SEYMOUR, Niles Edward (Junior, 1912), Designing Draftsman of Open Hearth Steel Plants, Wellman-Seaver-Morgan Co., and 1062 E. 99th St., Cleveland, O.
- SHADALL, Charles Edward (1912), Mech. Engr. and Designer, Nordberg Mfg. Co., and *for mail*, 468 Idaho St., Milwaukee, Wis.
- SHAFTER, Ruland R. (Junior, 1912), Estimating and Sales Engr., Traylor Engrg. & Mfg. Co., 30 Church St., and 1240 Simpson St., New York, N. Y.
- SHALLCROSS, Watson Comly (1910), Mgr. Caustic Soda Dept., Solvay Process Co., and 143 Virginia Park, Detroit, Mich.
- SHALLENBERGER, Louis R. (1895; 1902), Civ., Mech. and Irrigation Engr., 205 Second St., Paonia, Delta Co., Colo.
- SHANKLAND, E. C. (1895), Civ. Engr., E. C. & R. M. Shankland, 1106 Rookery Bldg., and 4808 Champlain Ave., Chicago, Ill.
- SHARP, John Thomas, Jr. (Junior, 1910) Supt., Canton Elec. Light & Water Wks., Canton, Miss.
- SHARPE, Henry D. (Associate, 1901), Treas., Brown & Sharpe Mfg. Co., and *for mail*, 130 Angell St., East Side Sta., Providence, R. I.
- SHARPE, Lucian (Associate, 1902), with Brown & Sharpe Mfg. Co., 130 Angell St., Providence, R. I.
- SHAW, Arthur Derwood (Associate, 1905), Packard Motor Car Co., 61st St. and Broadway, New York, N. Y.
- SHAW, Charles H. (Associate, 1906), West. Sales Mgr., Potter & Johnston Mch. Co., 967 National Ave., Milwaukee, Wis.

- SHAW, Edwin Coupland (1890; 1892), Second V. P. and Mgr. of Wks., The B. F. Goodrich Co., and *for mail*, 120 S. Union St., Akron, O.
- SHAW, James C. (1909), Engr. and Tech. Adviser, Kawasaki Dockyard Co., Ltd., and 2 Nakayamale Dori 3 Chome, Kobe, Japan.
- SHAW, Joseph D. (1910), Engr. and Contr., The Fountain-Shaw Engrg. Co., Southwestern Life Bldg., and 1911 Ross Ave., Dallas, Tex.
- SHEARER, Christopher A. (Junior, 1910), Engr., Nationale Radiator Gesellschaft, Schönebeck-Elbe, Germany, and R. 2, Reading, Pa.
- SHEDD, Frank Edson (1906), V. P. and Ch. Engr., Lockwood, Greene & Co., 60 Federal St., Boston, Mass.
- SHEEDY, Joseph Edward (1912), Supt. Engr., Hawaiian Elec. Co., Ltd., and *for mail*, 1547 Beretania St., Honolulu, Hawaii.
- SHELDON, F. P. (1890), Steam, Hyd., Elec. and Mill Engr., Industrial Trust Bldg., and 47 Howard Ave., Providence, R. I.
- SHELDON, Samuel B. (Junior, 1900), Cons. Engr., 117 Church St., Bethlehem, Pa.
- SHELDON, Thos. C. (1884), Secy. and Treas., Fitchburg Duck Mills, and *for mail*, 8 School St., Fitchburg, Mass.
- SHELMIRE, W. H., Jr. (1899), 69th and Launton Ave., Oak Lane, Philadelphia, Pa.
- SHELTON, William Arnold (Junior, 1912), The Goodyear Tire & Rubber Co., and *for mail*, 814 E. Buchtel Ave., Akron, O.
- SHENBERGER, Geo. H. (Junior, 1909), Goulds Mfg. Co., and *for mail*, 197 Fall St., Seneca Falls, N. Y.
- SHEPARD, Frank E. (1899; 1902), Pres. and Mech. Engr., Denver Engrg. Wks., P. O. Box 1802, and 924 Washington St., Denver, Colo.
- SHEPARD, Geo. H. (1903), Emerson Co., 30 Church St., New York, and *for mail*, 1206 Harrison St., Syracuse, N. Y.
- SHEPARD, Louis A. (1903), Munsey Bldg., Washington, D. C.
- SHEPERDSON, John William (1908; 1911), Asst. Ch. Engr., Cambria Steel Co., Johnstown, and *for mail*, 126 Tioga St., Westmont, Johnstown, Pa.
- SHEPHERD, Wm. G. (1890; 1904), Genl. Mgr., Shepherd Engrg. Co., and *for mail*, Sherman Rd., Williamsport, Pa.
- SHEPPARD, John Leefe, Jr. (Associate, 1906), Constr. Supt., N. E. Engrg. Co., 50 Church St., New York, N. Y., and *for mail*, P. O. Box 486, Newark, O.
- SHERBURNE, Kenneth (Junior, 1904), Engr., Automatic Appliance Co., 172 Columbus Ave., and *for mail*, 363 Marlborough St., Boston, Mass.
- SHERIDAN, Richard B. (1909), Genl. Mgr., The Brown Hoisting Mchy. Co., and 1893 E. 82d St., Cleveland, O.
- SHERMAN, Mason H. (1902), Mgr., By-Products Coke Corp., 1121 Marquette Bldg., Chicago, and 121 S. 8th Ave., La Grange, Ill.
- SHERMAN, W. D. (1907), Inventor, Cons. Engr., 229 Brocton Ave., Riverside, Cal.

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- SHERWOOD, Mather W. (1909), Asst. Mgr. Min. Dept., Chicago Pneu. Tool Co., 1010 Fisher Bldg., and *for mail*, 6034 Jefferson Ave., Chicago, Ill.
- SHIEBLER, Marvin (1905; 1909), Cons. Engr., 30 Church St., New York, and 278 Berkeley Pl., Brooklyn, N. Y.
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- SHIELDS, William D. (Junior, 1908), Edgeworth, Allegheny Co., Pa.
- SHIPLEY, Albert Robosson (Associate, 1912), Efficiency Engr., N. E. Butt Co., and *for mail*, 29 Arch St., Providence, R. I.
- SHIPLEY, Grant B. (Associate, 1907), Pres. and Genl. Mgr., Pittsburgh Wood Preserving Co., and Pittsburgh Athletic Asso., Pittsburgh, Pa.
- SHIPLEY, Thos. (1891), Genl. Mgr., York Mfg. Co., and cor. Linden and W. York Aves., York, Pa.
- SHIRLEY, Loyd Emmet (1912), Supt., The C. S. Bell Co., Hillsboro, O.
- SHIRLEY, Robert (1906), Wks. Mgr., Chapman Valve Mfg. Co., Indian Orchard, and *for mail*, 37 Dresden St., Springfield, Mass.
- SHIRRELL, David (1890), Am. Loco. Co., and *for mail*, 852 Union St., Schenectady, N. Y.
- SHODRON, John Geo. (Junior, 1908), Cons. Engr. and Arch., 220 Burrell St., Milwaukee, Wis.
- SHOUDY, Wm. Allen (Junior, 1903), Baltimore Copper Smelting & Rolling Co., Baltimore, and 19 Merrymount Rd., Roland Park, Md.
- SHOUVLIN, Patrick J. (1909), Prop., Superior Gas Eng. Co., and 1134 E. Heigh St., Springfield, O.
- SHRIVER, Harry T. (Junior, 1893), Prop., T. Shriver & Co., Harrison, and *for mail*, Llewellyn Park, West Orange, N. J.
- SIBLEY, Frederick H. (1908), Mech. Engrg., Univ. of Kan., Lawrence, Kan.
- SIBLEY, Mark M. (1904; Associate, 1904), Mech. Engr., Wilt Twist Drill Co., Walkerville, Ont., Canada, and *for mail*, 410 Jefferson Ave., Detroit, Mich.
- SIBLEY, Robert (1912), Prof. Mech. Engrg., Univ. of Cal., Berkeley, and Ch. Editor, Journal of Electricity, Power and Gas, 106 Rialto Bldg., San Francisco; also, 2629 Le Conte Ave., Berkeley, Cal.
- SIBSON, Horace E. (Junior, 1904), Mech. Engr., Harrison Safety Boiler Wks., 17th St. and Allegheny Ave., Philadelphia, and *for mail*, P. O. Box 159, Cynwyd, Pa.
- SICKA, Louis Theodore (1912), Mech. Supt., Tooele Plant, Internatl. Smelting & Refining Co., Tooele, Utah.
- SICKLES, Eugene Charles (1896; 1904), Supt. Power Plants, B. & O. R. R., Central Bldg., and 844 N. Carey St., Baltimore, Md.

- SIEGEL, Fred Jack (Junior, 1912), 564 Park Ave., New York, N. Y.
- SIEVERS, Ernest John Joseph (Junior, 1910), Cadet Engr., Hudson Div., Pub. Service Elec. Co., and *for mail*, 65 Willow Ave., Hoboken, N. J.
- SIMON, Arthur (1912), Elec. Engr., Cutler-Hammer Mfg. Co., and 3021 McKinley Blvd., Milwaukee, Wis.
- SIMONDS, Daniel (1892), Pres., Simonds Mfg. Co., 35 North St., and 40 Prospect St., Fitchburg, Mass.
- SIMPKINSON, Garrett W. (1912), Member of Firm, Bert L. Baldwin & Co., 73 Perin Bldg., Cincinnati, O.
- SIMPSON, Colin C. (1907), Asst. Secy. and Genl. Supt. of Distribution, Consltd. Gas Co. of N. Y., 4 Irving Pl., New York, N. Y., and 71 Park St., Montclair, N. J.
- SIMPSON, Colin Campbell, Jr. (Junior, 1912), Engr. Dept. of Mains and Services, Consltd. Gas Co. of N. Y., 4 Irving Pl., New York, N. Y.
- SIMPSON, Geo. R. (1889; 1897), Prin. Examiner in Charge Ry. and Rolling Stock Div., 304 U. S. Pat. Office, and Lincoln Apts., Washington, D. C.
- SIMPSON, Robert James Osborne (1906), Supt. and Mech. Engr., L. S. Starrett & Co., and *for mail*, 129 Union St., Athol, Mass.
- SIMPSON, Tracy Whittelsey (Junior, 1912), Secy. and Treas., The Leader Eng. Co., and *for mail*, 515 Pleasant St., Grand Rapids, Mich.
- SIMPSON, William K. (Junior, 1909), Mech. Engr., Nason Mfg. Co., 71 Fulton St., New York, N. Y., and 165 N. Parkway, East Orange, N. J.
- SINCLAIR, Dr. Angus (1883), Editor and Publisher, Angus Sinclair Co., 114 Liberty St., New York, N. Y., and *for mail*, Millburn, N. J.
- SINCLAIR, A. F. (1910; 1911), Genl. Mgr., Security Cement & Lime Co., Security, and *for mail*, 519 N. Potomac St., Hagerstown, Md.
- SINCLAIR, George M. (1887; 1890), Cons. Engr., 618 Chestnut St., and 1521 Spruce St., Philadelphia, Pa.
- SINGER, Sidney Chas. (Junior, 1909), Supt. of Distribution, Syracuse Ltg. Co., and 100 E. LaFayette Ave., Syracuse, N. Y.
- SINGLETON, Arthur B. (Junior, 1912), David M. Kerr Mchy. Co., 1922 Ford Bldg., Detroit, Mich.
- SKOGMARK, John (1912), Constr. Engr., Mineral Point Zinc Co., Mineral Point, Wis.
- SLADE, Arthur J. (1904), Cons. Engr., 1600 Broadway, and 172 E. 72d St., New York, N. Y.
- SLATER, F. R. (Junior, 1894), Genl. Supt., Tex. Power & Light Co., 1320 Commerce St., Dallas, Tex.
- SLAUGHTER, Benjamin Gabriel, Jr. (1911), Cons. Engr. with Utley Wedge, 126 Athens Ave., and *for mail*, 120 Simpson Rd., Ardmore, Pa.
- SLAUSON, Harold W. (Junior, 1908), Mgr., Tech. Press Bureau, Box 27, Times Sq. Sta., New York, and *for mail*, S. Broadway and Post St., Yonkers, N. Y.

- SLAWSON, Harry H. (Junior, 1904), 345 Eastern Parkway, Brooklyn, N. Y.
- SLEE, Norman S. (Junior, 1909), Babcock & Wilcox Co., 85 Liberty St., New York, N. Y., and *for mail*, 81 Hillside Rd., El Mora, Elizabeth, N. J.
- SLICHTER, Walter I. (1902; 1912), Prof. Elec. Engrg., Columbia Univ., New York, N. Y.
- SLINING, George J. (1909), Supt., Cleveland-Cliffs Iron Co., Gladstone, Mich.
- SLOANE, Charles O'Connor (Junior, 1910), Pratt & Whitney Co., 111 Broadway, New York, N. Y., and *for mail*, 55 Montrose Ave., South Orange, N. J.
- SLOCUM, Chester A. (Junior, 1907), Cons. Engr., Douglas Sprague & Associates, 39 Cortlandt St., New York, N. Y., and 58 Chelsea Ave., Long Branch, N. J.
- SLOMER, Wm. Frederick (1909), Engr. Rep., The Fellows Gear Shaper Co., Springfield, Vt., and *for mail*, 131 Lothrop Ave., Detroit, Mich.
- SMALL, H. J. (1884), Vice-President, 1893-1895; Genl. Supt. M. P., So. Pacific Co., Flood Bldg., and *for mail*, 2430 Broadway St., San Francisco, Cal.
- SMART, Richard Addison (1894; 1900; 1906), Canadian Home Land Co., Ltd., Bank of Hamilton Chambers, Hamilton, Ont., Canada.
- SMEAD, William H. (1906; 1911), Mgr. Htg. and Equip. Dept., The Samuel Austin & Son Co., 6408 Euclid Ave., and 11 Charles Rd., E. C., Cleveland, O.
- SMITH, Albert Samuel (1911), Supt. of Bldgs. and Power, Mass. Inst. of Tech., Boston, and *for mail*, 32 Oakland St., Winthrop, Mass.
- SMITH, Allen C. (1902), Otis Elev. Co., New York, and *for mail*, 33 Morris St., Yonkers, N. Y.
- SMITH, Alton Lincoln (1904), Prof. Drawing and Mch. Design, Worcester Poly. Inst., and *for mail*, 18 Washington Ave., Worcester, Mass.
- SMITH, A. Parker (1887), Lawyer, Counsel in Pat. Cases, U. S. Express Bldg., 2 Rector St., New York, N. Y.
- SMITH, Albert W. (1880; 1892), Dir., Sibley College, Cornell Univ., Ithaca, N. Y.
- SMITH, Augustus (1902), Pres., Bergen Point Iron Wks., foot W. 5th St., Bayonne, N. J.
- SMITH, Cameron C. (1906), Pres. and Genl. Mgr., Union Steel Castings Co., and 719 N. Negley Ave., Pittsburgh, Pa.
- SMITH, Carl D. (Junior, 1909), Engr., U. S. Bureau of Mines, 40th and Butler Sts., Pittsburgh, and 215 Ninth St., Aspinwall, Pa.
- SMITH, Charles P. (Junior, 1888), Lower Pacific Mills, and *for mail*, 11 Byron Ave., Lawrence, Mass.
- SMITH, Edward Jos. (1904), Cons. Engr. and Mfrs.' Agt., 30 Church St., New York, and 553 Lincoln Pl., Brooklyn, N. Y.

- SMITH, Ellis Burton (Junior, 1905), Supt. Toledo Lamp Wks., Genl. Elec. Co., Toledo, O.
- SMITH, Ernest L. (1901; 1908), West. Rep., R. I. V. Co., 870 Woodward Ave., and 24 Chandler Ave., Detroit, Mich.
- SMITH, George H. (1881), Beaman & Smith Co., Gordon and Reynolds Aves., and *for mail*, 33 Mawney St., Providence, R. I.
- SMITH, George Hampton (1911), Asst. to Ch. Engr. Pittsburgh Furnaces, Carnegie Steel Co., and *for mail*, 28 Fourth St., Aspinwall, Pa.
- SMITH, George Marshall (Associate, 1904), V. P. and Treas., A. E. Anderson & Co., 642 Prudential Bldg., Buffalo, N. Y., and 360 Crescent Ave., Chicago, Ill.
- SMITH, Gilbert S. (1893), Elec. Contr., J. F. Buchanan & Co., 1719 Chestnut St., and Oak Lane, Philadelphia, Pa.
- SMITH, Harold B. (1894), Prof. Elec. Engrg., Dir. Elec. Engrg. Dept., Worcester Poly. Inst., and 20 Trowbridge Rd., Worcester, Mass.
- SMITH, Harry E. (1894; 1903), Assoc. Prof. Mech. Engrg. Agri. and Mech. College of Tex., College Station, Tex.
- SMITH, Harry Ford (1908), Secy. and Genl. Mgr., Smith Gas Power Co., Lexington, O.
- SMITH, Harry J. (1909), Wks. Mgr. and Ch. Engr., Hill Clutch Co., Cleveland, O.
- SMITH, Howard Wells (Junior, 1892), Ch. Engr., Stand. Eng. Co., and *for mail*, P. O. Box 126, Ellwood City, Pa.
- SMITH, J. Waldo (1896), Ch. Engr., Bd. of Water Supply, City of N. Y., 165 Broadway, and 136 Madison Ave., New York, N. Y.
- SMITH, James W. (1909), Mgr., The Trenton Iron Co., Trenton, N. J.
- SMITH, Jesse M. (1883), Manager, 1891-1894; Vice-President, 1894-1896; 1899-1901; President, 1909; Life Member; Mech. and Elec. Engr. and Expt. in Pat. Causes, Rm. M-14, 220 Broadway, and *for mail*, 120 Riverside Drive, New York, N. Y.
- SMITH, John Smart (1912), Engr. Oil Dept., S. Pearson & Sons, and *for mail*, 47 Parliament St., Westminster, London, S. W., England.
- SMITH, Julian C. (1907), Pres. and Mgr., Vacuum Spec. Co., First Ave. and 36th St., New York, and Douglaston, L. I., N. Y.
- SMITH, L. P. C. (Junior, 1906), Ch. Draftsman Gas Eng. Dept., Allis-Chalmers Co., and *for mail*, 606 72d Ave., West Allis, Wis.
- SMITH, Mark Elmer (Junior, 1908), Mgr. and Owner, Irwin's Garage, 513-515 French St., and *for mail*, 246 W. 21st St., Erie, Pa.
- SMITH, Oberlin (1881), President, 1889-1890; Manager, 1883-1886; Pres., Ferracute Mch. Co., and Lochwold, Bridgeton, N. J.
- SMITH, Persifor Frazer, Jr. (1904), Supt. M. P., Pa. Lines, 1036 Ohio Bldg., Toledo, O.

- SMITH, Robert W. (1890), V. P. Hilles & Jones Co., and *for mail*, 1105 Franklin St., Wilmington, Del.
- SMITH, Roy B. (Junior, 1905), Asst. M. P. Inspr., Pa. Lines West, and *for mail*, 356 14th Ave., Columbus, O.
- SMITH, Roy Harman (Junior, 1906), Supt., Natl. Screw & Tack Co., Cleveland, O.
- SMITH, S. H. (Associate, 1907), Supt., North Melbourne Elec. Tramways & Ltg. Co., Ltd., Mt. Alexander Rd., and Clydehall, cor. Harding and East Sts., Ascot Vale, Melbourne, Australia.
- SMITH, Sidney L. (1880), Mech. Engr., 90 Elm Hill Ave., Roxbury, Mass.
- SMITH, T. Carpenter (1886), Mech. Engr., 220 S. Broad St., Philadelphia, Pa.
- SMITH, William (1911), M. M. Eliza Furnaces, Jones & Laughlin Steel Co., and *for mail*, 3233 Park View Ave., Pittsburgh, Pa.
- SMITH, William Earhart (Junior, 1908), Draftsman, Babcock & Wilcox Co., and *for mail*, 421 W. Lake Ave., Barberton, O.
- SMITH, Wm. Edward (1900), Pres., Swedish Portland Cement Mfg. Co., P. O. Box 263, and *for mail*, Strelna, St. Petersburg, Russia.
- SMITH, William H. (1911), Factory Mgr., Ford Motor Co., and *for mail*, 63 Burlingame Ave., Detroit, Mich.
- SMITH, W. W. (1909), Sales Engr., Chas. C. Moore & Co. Engrs., 424 I. N. Van Nuys Bldg., and *for mail*, 460 E. Adams St., Los Angeles, Cal.
- SMITH, Lieut. William Walker (1912), Lieut. U. S. N., U. S. S. California, Pacific Sta., San Francisco, Cal.
- SNEDDON, James P. (1891), Genl. Supt., Babcock & Wilcox Co., and 34th St. and Ave. A, Bayonne, N. J.
- SNODGRASS, John McB. (Junior, 1904), Asst. Prof. Ry. Engrg., Univ. of Ill., Urbana, and 306 Davidson St., Champaign, Ill.
- SNOW, Norman Leslie (Junior, 1910), Asst. Genl. Sales Mgr., Terry Steam Turbine Co., 90 West St., New York, N. Y., and *for mail*, 1342 Watchung Ave., Plainfield, N. J.
- SNOW, Sylvester M. (1890), Cons. Engr., 85 Water St., Boston, Mass., and *for mail*, 257 Gano St., East Side Sta., Providence, R. I.
- SNOW, Walter B. (1898), Publicity Engr., 170 Summer St., Boston, and 115 Russell Ave., Watertown, Mass.
- SNOW, Wm. Gage (1905), N. E. Mgr., Warren Webster & Co. of Camden, N. J., Penn Mut. Bldg., Boston, and 11 Devon Rd., Newton Centre, Mass.
- SNYDER, George T. (1912), Mech. Engr. Natl. Wks., Natl. Tube Co., and 1200 Park St., McKeesport, Pa.
- SNYDER, Leo H. (Junior, 1907), Joseph Dixon Crucible Co., and 782 Montgomery St., Jersey City, N. J.
- SNYDER, William E. (1900), Mech. Engr., Am. Steel & Wire Co., Frick Bldg., and *for mail*, 1712 Morrell St., N. S., Pittsburgh, Pa.

- SNYDER, William R. (Junior, 1911), Pur. Agt., Fulton Bag & Cotton Mills, and *for mail*, 714 Highland Ave., Atlanta, Ga.
- SNYPP, Charles Edward (1912), Dist. Engr., The So. Cotton Oil Co., New Orleans, and *for mail*, Gretna, La.
- SOPER, Ellis (1905; Associate, 1908), Pres., The Soper Engrg. Co., Ford Bldg., Detroit, Mich., and James Bldg., Chattanooga, Tenn.
- SORGE, Adolph, Jr. (1886), Mech. Engr., 1537-1539 Monadnock Blk., Chicago, Ill., and St. Joseph, Mich.
- SORNBERGER, Edwin C. (1890), 208 Lancaster Ave., Buffalo, N. Y.
- SORZANO, Julio Frederico (1884), Life Member; Cons. Civ. and Mech. Engr., Pres., Pan-Am. Chamber of Commerce, 42 Broadway, New York, and *for mail*, 228 Garfield Pl., Brooklyn, N. Y.
- SOUTHER, Henry (1894), Pres., Henry Souther Engrg. Corp., 11 Laurel St., Hartford, Conn.
- SOUTHWORTH, Martin O. (1907), Elec. Engr., Fairbanks, Morse & Co., 900 S. Wabash Ave., and *for mail*, Hotel Windermere, Chicago, Ill.
- SOVERHILL, Harvey A. (1909), V. P. and Genl. Supt., Root & Van Dervoort Engrg. Co., and V. P., Moline Auto. Co., East Moline, and 623 23d St., Moline, Ill.
- SOWDEN, Parkin T. (Junior, 1908), Mech. Engr., Stand. Silver Co., Ltd., North Madison Ave., and 32 Palmerston Gardens, Toronto, Ont., Canada.
- SPACKMAN, Henry S. (1899), Pres., Henry S. Spackman Engrg. Co., 42 N. 16th St., Philadelphia, and 105 Ardmore Ave., Ardmore, Montgomery Co., Pa.
- SPALDING, Chester M. (1894), Genl. Elec. Co., and *for mail*, 6 Catherine St., Schenectady, N. Y.
- SPARROW, John Porterfield (1898), Ch. Engr., N. Y. Edison Co., 55 Duane St., New York, and 279 E. 16th St., Brooklyn, N. Y.
- SPEED, William S. (1900; 1904), Pres., Louisville Cement Co., 325 W. Main St., and *for mail*, 523 Park Ave., Louisville, Ky.
- SPEER, Chas. Henry (Associate, 1907), Ch. Engr., Algoma Steel Co., Ltd., and *for mail*, 175 N. McDougall St., Sault Ste. Marie, Ont., Canada.
- SPENCER, C. G. (1911), Mech. Engr., Toronto Power Co., 12 Adelaide St., E., Toronto, Ont., Canada, and 30 Salem St., Springfield, Mass.
- SPENCER, Frank C. (1908; 1912), West. Elec. Co., Hawthorne, and *for mail*, 3342 W. 19th St., Chicago, Ill.
- SPENCER, William J. (Junior, 1906), Genl. Sales Mgr., Pure Water Apparatus Co., Abbott Bldg., and *for mail*, The Engineers' Club, Philadelphia, Pa.
- SPERRY, Elmer Ambrose (1910), Pres. and Engr., The Sperry Gyroscope Co., 74 Broadway, New York, and 100 Marlborough Rd., Brooklyn, N. Y.
- SPIDY, Edgar Thomas (Junior, 1912), Asst. Genl. Foreman, Canadian Pacific Ry., Winnipeg, and *for mail*, Osborn River Apts., Fort Rouge, Winnipeg, Man., Canada.

- SPILLMAN**, Harry St. Clair (Junior, 1910), Constr. Engr., Continental Motor Mfg. Co., and *for mail*, 1465 Brush St., Detroit, Mich.
- SPILSBURY**, Edmund Gybbon (1890), Cons. Engr., 45 Broadway, New York, and 23 Park Pl., New Rochelle, N. Y.
- SPIRO**, Charles (1908), Pres. and Genl. Mgr., Columbia Typewriter Mfg. Co., 39 W. 116th St., and *for mail*, 10 W. 121st St., New York, N. Y.
- SPOERRI**, Henry (1907), Mech. Cons. Engr., Spoerri & Co., Bergstrasse 76, Zurich, Switzerland.
- SPONSEL**, Charles W. (1902), Factory Supt., J. I. Case Threshing Mch. Co., Motor Wks., and *for mail*, 1422 Wisconsin St., Racine, Wis.
- SPONSLER**, Charles Frederick (1904; 1912), Supt. of Mech. Plant, Bureau of Standards, Dept. Commerce and Labor, and *for mail*, 1644 Park Rd., Washington, D. C.
- SPOTTON**, Arthur Knowlson (Junior, 1906), Ch. Engr., Goldie & McCulloch Co., Ltd., Galt, Ont., Canada.
- SPRADO**, Carl G. (1903), Engr. in Charge Gas and Blowing Eng. Dept., Allis Chalmers Co., and *for mail*, 752 29th St., Milwaukee, Wis.
- SPRADO**, Ralph (1900), Ch. Engr., Geo. E. Dow Pumping Eng. Co., San Francisco, and *for mail*, 911 Grand St., Alameda, Cal.
- SPRAU**, William C. (Junior, 1910), Mech. Engr., Harbor and Subway Com., City of Chicago, City Hall Sq. Bldg., and *for mail*, 1445 Melville Pl., Chicago, Ill.
- SPRINGER**, John J. (Junior, 1903), Sales Engr., Crane Hawley Co., Court and Sycamore Sts., Cincinnati, and *for mail*, 4815 Marion St., East Norwood, O.
- SPRONG**, Severn D. (1912), Edison Elec. Illuminating Co. of Brooklyn, 360 Pearl St., and 261 Garfield Pl., Brooklyn, N. Y.
- SPRUANCE**, Wm. C., Jr. (1906), du Pont Bldg., Wilmington, Del.
- SPURLING**, O. C. (1907), West. Elec. Co., Hawthorne Sta., Chicago, Ill.
- SQUIRE**, Raymond Samuel (Junior, 1912), Engr. of Tests, Engrg. Dept., Stevens Duryea Co., and *for mail*, 46 Arlington St., Chicopee Falls, Mass.
- STACKS**, H. Roy (1909), Supt., The Black Clawson Co., and 314 N. 7th St., Hamilton, O.
- STACY**, Elmer Neill (1912), Designing and Genl. Mech. Engrg., 3216 Hennepin Ave., Minneapolis, Minn.
- STAFFORD**, Benjamin E. D. (Junior, 1895), Genl. Mgr., Flannery Bolt Co., Vanadium Bldg., and 4335 Schenley Farms Terrace, Pittsburgh, Pa.
- STANBROUGH**, Duncan G. (Associate, 1907), Asst. Shop Supt., U. S. Navy Yard, and 39 St. Riverview, Norfolk, Va.
- STANCLIFF**, Arthur D. (Junior, 1912), Cement, Tex.
- STANDLEY**, Albert H. (Junior, 1899), V. P. and Genl. Supt., Downington Mfg. Co., and *for mail*, Box 3, also 336 E. Lancaster Ave., East Downington, Pa.

- STANFORD, J. Verne (1911), Prof. Mech. Engrg., Univ. of Pa., Engrg. Bldg., and 5121 Chestnut St., Philadelphia, Pa.
- STANGLAND, B. F. (1889; 1892), Mech. Engr., 45 Fulton St., and 157 W. 123d St., New York, N. Y.
- STANLEY, Alix W. (1893; 1903), Pres., Stanley Rule & Level Co., New Britain, Conn.
- STANLEY, Frank A. (1911), West. Editor, American Machinist, Cincinnati, and *for mail*, 3556 Monteith Ave., Hyde Park, Cincinnati, O.
- STANTON, Alden D. (Junior, 1909), Ch. Draftsman Dept. Bldgs. and Grounds, Columbia Univ., New York, and *for mail*, 1159 Dean St., Brooklyn, N. Y.
- STANTON, Francis A. O'C. (Junior, 1909), City Engr., 1104 Bloomfield St., Hoboken, N. J., and 2 Rector St., New York, N. Y.
- STANTON, Frank McMillan (1892), Life Member; Min. Engr., 208 Fifth Ave., and 419 W. 23d St., New York, and Shore Rd., Whitestone, L. I., N. Y.
- STANWOOD, J. B. (1889), Manager, 1897-1900; Engr. and V. P., Houston, Stanwood & Gamble Co., and *for mail*, 623 Oak St., Cincinnati, O.
- STAPLES, H. A. (Junior, 1903), Foreman Tube Mill, Bridgeport Brass Co., and *for mail*, 1281 Noble Ave., Bridgeport, Conn.
- STARBUCK, George F. (Junior, 1901), Draftsman, Boston Elev. Ry., Boston, and *for mail*, Waltham, Mass.
- STARKWEATHER, Wm. G. (1897), N. E. Mgr., C. H. Wheeler Mfg. Co., and A. L. Ide & Sons, 53 State St., Boston, and 17 Gibson Rd., Newtonville, Mass.
- STARR, Frederick W. (1912), Asst. Mgr. Bicycle and Motorcycle Dept., Pope Mfg. Co., and *for mail*, 70 Webster St., Hartford, Conn.
- STARR, John Edwin (1905), Pres., Starr Engrg. Co., 50 Church St., and 12 Fifth Ave., New York, N. Y.
- STAUDE, Edwin G. (Junior, 1908), Pres. and Managing Dir., E. G. Staude Mfg. Co., 526 Fifth St., S., and *for mail*, 1839 Kenwood Parkway, Minneapolis, Minn.
- STEARNS, Albert (1880), Supt., Church & Dwight, 1416 Willis Ave., and 329 James St., and *for mail*, Box 74, Syracuse, N. Y.
- STEARNS, Thomas B. (1883), Vice-President, 1911-1913; Min. and Mech. Engr., 1720 California St., and 1218 Washington Ave., Denver, Colo.
- STEBBINS, Albert C. (1904), V. P., Niles-Bement-Pond Co., and 835 W. 7th St., Plainfield, N. J.
- STEBBINS, Theodore (1903), 27 W. 67th St., New York, N. Y.
- STEEL, Reginald Armstrong (Junior, 1912), Estimator and Draftsman, McDougall & Potter Co., and *for mail*, 558 W. 162d St., New York, N. Y.
- STEELE, Ben Wadley (Junior, 1907), V. P. and Genl. Mgr., Atlanta & St. Andrews Bay Ry., Dothan, Ala.
- STEELE, Walter D. (1892; 1901), V. P., Benjamin Elec. Mfg. Co., 120-128 S. Sangamon St., Chicago, Ill.

- STEEN, Arthur B. (1903), Mgr., Natl. Transit Co. Shops, Oil City, Pa.
- STEENSTRUP, P. S. (1906), Pres., Pacific Motor Supply Co., 220 W. Main St., and *for mail*, 109 Geneva Ave., Medford, Ore.
- STEHLIN, Joseph (Associate, 1905), Pres., Stehlin Miller Henes Co., Terminal Bldg., 41st St. and Park Ave., and *for mail*, Pres., Farmers' Feed Co., 532 E. 76th St., also The Van Cortlandt, 96th St. and Park Ave., New York, N. Y.
- STEINMETZ, Charles P. (1907), Cons. Engr., Genl. Elec. Co., and Prof. Elec. Engrg., Union Univ., and *for mail*, Wendall Ave., Schenectady, N. Y.
- STEPHENS, Phineas Varnum (1910), Cons. Engr., 1199 Boston Rd., New York, N. Y., and 22 Main St., Jacksonville, Fla.
- STEPHENSON, Hermann (Junior, 1909), Brighton Mills, Passaic, N. J.
- STETSON, George R. (1880), Vice-President, 1898-1900; Pres. of Bd. of Dirs., New Bedford Gas & Edison Light Co., 121 Middle St., and 7 Anthony St., New Bedford, Mass.
- STEVENS, Alfred H. (1898; 1903), Engr. and Contr., 149 Broadway, New York, and *for mail*, 400 Ninth St., Brooklyn, N. Y.
- STEVENS, Burt Dwight (1912), Mech. Engr. Charge Designing Dept. and Pat. Matters, Miehle Ptg. Press & Mfg. Co., 14th and Robey Sts., Chicago, Ill.
- STEVENS, E. A. (Associate, 1889), Life Associate; Pres., Hoboken Land & Improvement Co., 1 Newark St., Hoboken, and Rd. Comr., State of N. J., State House, Trenton; also, Bernardsville, N. J.
- STEVENS, Harold L. (Associate, 1904), Dist. Sales Agt., Lackawanna Steel Co., 40 Central St., Boston, Mass.
- STEVENS, Jesse F. (Associate, 1904), 14 Prospect Ave., Wollaston, Mass.
- STEVENS, John A. (1902), Cons. Engr., 107 Merrimack St., and 78 Hanks St., Lowell, Mass.
- STEVENS, R. C. (1890; 1906), Ch. Engr., Skinner Eng. Co., and *for mail*, 454 W. 11th St., Erie, Pa.
- STEVENS, Robert H. (1903; 1912), Stevens Bros., 149 Broadway, New York, N. Y.
- STEVENS, Sidney (1910), V. P., Ludlow Mfg. Associates, Ludlow, Mass.
- STEVENS, Wm. N. (Junior, 1886), Engrg. Dept., John Simmons Co., 110 Centre St., New York, and 243 Brooklyn Ave., Brooklyn, N. Y.
- STEVENSON, A. A. (1888), V. P., Stand. Steel Wks. Co., 1104 Morris Bldg., Philadelphia, and 121 Edgewood Rd., Ardmore, Pa.
- STEVENSON, Louis T. (Junior, 1907), Engr., Mountain Mill Paper Co., Lee, and *for mail*, 28 Reed St., Pittsfield, Mass.
- STEVENSON, T. Kennedy (Junior, 1908), Engr., Duplex Metals Co., 80 Church St., and 88 Morningside Drive, New York, N. Y.

- STEVENSON, William Alston (1900), Mgr., Keystone Drop Forge Wks., Chester, Pa.
- STEWART, George Henry (1912), Charge of Designing and Supt. Constr. of Mchs., L. & J. A. Stewart, and *for mail*, 51 Park St., Rutland, Vt.
- STEWART, Charles Alexander, Jr. (Junior, 1912), Genl. Elec. Co., Harrison, N. J., and *for mail*, 841 Lincoln Pl., Brooklyn, N. Y.
- STEWART, Chas. E. (Junior, 1908), Asst. Prof. Mech. Arts, Tufts College, Tufts College P. O., Mass.
- STEWART, Reid T. (1894), Prof. Mech. Engrg., Univ. of Pittsburgh, and 1524 Shady Ave., Pittsburgh, Pa.
- STIEFEL, Ralph C. (1897), Mech. Engr., Ellwood City, Lawrence Co., Pa.
- STILL, Frederick R. (1909), Ch. Engr. and Secy., Am. Blower Co., and 1400 Russell St., Detroit, Mich.
- STILLMAN, Austin Frank (1907; 1912), V. P., Wks. Mgr. and Secy., Watson-Stillman Co., Terminal Bldg., 50 Church St., New York, N. Y., and Hampton Hall, Cranford, N. J.
- STILLMAN, Edwin A. (Junior, 1908), Watson-Stillman Co., 50 Church St., New York, N. Y.
- STILLMAN, Howard (1895), Mech. Engr. and Engr. of Tests, So. Pacific Co., 1180 Flood Bldg., San Francisco, and S. W. cor. Piedmont Ave. and Haste St., Berkeley, Cal.
- STIRLING, Allan (1880), Manager, 1881-1884; Vice-President, 1885-1887; Life Member; Drexel Bldg., Philadelphia, and Pleasant Mt., Wayne Co., Pa.
- STIX, Lawrence Cullman (Junior, 1911), 495 West End Ave., New York, N. Y.
- STOCKWELL, Rupert Kennedy (Junior, 1910), Ch. Engr., Braden Copper Co., Rancagua, Chile, S. A., and care of Dr. W. G. B. Terrell, Salt Lake City, Utah.
- STODDARD, Elgin (1911), V. P. and Genl. Mgr., Chas. C. Moore & Co., Engrs., 99 First St., San Francisco, and 144 Bonita Ave., Piedmont P. O., Oakland, Cal.
- STODDARD, Elliott J. (1909), Expt., R. A. Parker, Pat. Lawyer, 607 Moffat Blk., and 86 Ferris Ave., cor. John R. St., Detroit, Mich.
- STODDARD, Geo. Howland (1897), Treas. and Mgr., Quincy Market Cold Storage & Warehouse Co., 133 Commercial St., and 197 Beacon St., Boston, Mass.
- STOKOE, James (1910), Mgr., Panama Branch, Union Oil Co. of Cal., Balboa, Canal Zone, C. A.
- STOLLWERCK, Walter L. (1912), Bayenstr. 65, Cologne, Germany.
- STONE, Charles Waterman (1907), Cons. Engr., Genl. Elec. Co., and 18 State St., Schenectady, N. Y.
- STONE, Edison H. (Junior, 1912), Draftsman, The Lunkenheimer Co., and *for mail*, 3483 Cornell Pl., Cincinnati, O.
- STONE, Elmer B. (Junior, 1906), Genl. Supt., Corbin Cabinet Lock Co., and 3 Trinity St., New Britain, Conn.

- STONE, J. Wheaton (1898), Treas. and Mgr., East. Mchy. Co., and 27 Trumbull St., New Haven, Conn.
- STONE, Mason A., Jr. (Junior, 1907), Robins Belt Conveyor Co., 13 Park Row, and *for mail*, Yale Club, 30 W. 44th St., New York, N. Y.
- STONE, Thos. W. (Junior, 1903), Engr., West. Gas Constr. Co., and 919 Columbia Ave., Fort Wayne, Ind.
- STOTT, Henry G. (1902), Manager, 1907-1910, 1911-1912; Vice-President, 1912-1914; Supt. M. P., I. R. T. Co., and N. Y. R. R. Co., 600 W. 59th St., New York, and Rochelle Heights, New Rochelle, N. Y.
- STOUGHTON, Bradley (1911), Cons. Engr., 165 Broadway, and 20 E. 23d St., New York, N. Y.; also, New Canaan, Conn.
- STOUT, R. Paul (1906), Engr. of Ordnance, Bethlehem Steel Co., South Bethlehem, and *for mail*, 404 Market St., Bethlehem, Pa.
- STOVEL, Russell W. (1902; 1907), Mech. Engr., Westinghouse, Church, Kerr & Co., 10 Bridge St., New York, N. Y., and 48 Watchung Ave., Montclair, N. J.
- STRATTON, E. Platt (1883), Engr. and Naval Arch., Supvr., Am. Bureau of Shipping, and Am. Lloyds, Cons. Engr., Surveyor to N. Y. Board of Underwriters, 66 Beaver St., New York, and Ninth Ave. and 13th St., College Point, Borough of Queens, N. Y.
- STRATTON, Harry F. (Junior, 1904), Genl. Mgr., Elec. Controller & Mfg. Co., Cleveland, O.
- STRATTON, James Hughes (1906), Engr. of Constr., Wellman-Seaver-Morgan Co., and 10,093 Kee Mar Court, Cleveland, O.
- STRAUB, Albert A. (Junior, 1911), Asst. Ch. Engr. of Power Stas., Pittsburgh Rys. Co., and *for mail*, 301 Elysian St., Pittsburgh, Pa.
- STRAUB, C. Lee (1911), Mech. Engr., Lewisohn Bros., 11 Broadway, New York, and *for mail*, 296 Fisk Ave., Westerleigh, S. I., N. Y.
- STRAUSS, Julian B. (1910), Partner, Sachs, Strauss & Co., Bulletin Place 2, Sydney, Australia.
- STRAW, Chas. A. (1896; 1904), 218 Warren St., Hudson, N. Y.
- STREET, Clement F. (1893), V. P., Loco. Stoker Co., 30 Church St., and 445 Riverside Drive, New York, N. Y.
- STREET, Edgar L. (1903), Cons. Engr., 43 Cedar St., New York, N. Y., and Princeton, N. J.
- STREETTER, Lafayette P. (1902; Associate, 1903), Air Brake Engr., Ill. Central R. R., and *for mail*, P. O. Box 69, Chicago, Ill.
- STREETTER, Robert Leroy (Associate, 1907), Asst. Prof. Mech. Engrg., Rensselaer Poly. Inst., Troy, N. Y.
- STRIETER, Martin Ernst (Junior, 1911), Secy. and Treas., Horst & Strieter Co., 1417-1423 Second Ave., Rock Island, Ill.
- STRING, Joseph Starr (Junior, 1907), Asst. Engr., Mosher Water Tube Boiler Co., 30 Church St., New York, N. Y., and *for mail*, 130 Arlington Ave., East Orange, N. J.

- STRINGHAM, Joseph S. (1903), Pres., Frontier Engrg. Co., 1309 Majestic Bldg., and 275 Seminole Ave., Detroit, Mich.
- STROBEL, Victor O. (1892), Genl. Mgr. Crane Dept., Niles-Bement-Pond Co., Mifflin and Meadow Sts., and 1537 Pine St., Philadelphia, Pa.
- STROM, Carl A. (1905), Mgr., Am. Loco. Co., Pittsburgh, Pa.
- STRONG, Frank L. (1912), Dealer in Am. Mchy. and Supplies, 105 Escolta, Manila, P. I.
- STROTHMAN, Louis E. (1909), Mgr. and Ch. Engr. Pumping Eng. Dept., Allis-Chalmers Co., and 835 Summit Ave., Milwaukee, Wis.
- STROUD, Edwin G. (Junior, 1901), Mgr., Cleveland Engrg. Agency, Pres., E. G. Stroud Co., Rose Bldg., Cleveland, and 1502 Orchard Grove Ave., Lakewood, O.
- STROUSE, Sidney B. (Junior, 1909), Engr. and Member of Firm, Pa. Engrg. Co., 1119-1121 N. Howard St., and *for mail*, 3523 N. 21st St., Philadelphia, Pa.
- STRUCKMANN, Holger (1909), Ch. Engr. and Genl. Mgr., Iola Portland Cement Co., 817 Commercial Bldg., and 1618 Linwood Blvd., Kansas City, Mo.
- STUART, Milton Caleb (Junior, 1912), Asst. Steam Engr., Cambria Steel Co., and *for mail*, 216 Venango St., Johnstown, Pa.
- STUART, Percy Rankin (1911), Pacific Coast Mgr., The Roebling Constr. Co., 623-626 Crocker Bldg., San Francisco, and 702 Lerida Ave., Oakland, Cal.
- STUBBLEBINE, Winfred A. (1911), Engr., The Lehigh Fdy. Co., Fullerton, Pa.
- STUCKI, Arnold (1907), Engr., Oliver Bldg., and *for mail*, 1615 Falk Ave., N. S., Pittsburgh, Pa.
- STUMPF, Johann (1896), Prof. Mech. Engrg., Tech. Hochschule, Charlottenburg, and Kurfürstendamm, 33, Berlin, W., Germany.
- STUNTZ, J. E. (Junior, 1903), Supt., Cape Cruz Co., Ensenada de Mora, Cuba.
- STURGESS, John (1901), Secy., The Platt Iron Wks. Co., and 138 Central Ave., Dayton, O.
- STURGIS, Raynor Francis (Junior, 1912), Cost Accountant, Corn Products Refining Co., 17 Battery Pl., New York, N. Y., and *for mail*, 54 Early St., Morristown, N. J.
- STURGIS, Wm. Bayard (Junior, 1909), E. I. du Pont de Nemours Powder Co., Wilmington, Del.
- STUT, J. C. H. (1892), Cons. Mech. Engr., 417 Montgomery St., San Francisco, and *for mail*, 735 Adeline St., Oakland, Cal.
- STUTZ, C. C. (1900), Cons. Engr., 3830 Forest Ave., Norwood, O.
- SUCK, Adolph (1905), Arch. and Engr., 94 Arlington St., Hyde Park, Mass.
- SULLIVAN, Howard W. (Junior, 1908), Mgr., Union Drydock Co., Weehawken, N. J.
- SULZER, Jacob Carl (1891), Sulzer Bros., Winterthur, Switzerland.

- SUMMEY, David Long (1907), Mech. Engr., Chase Rolling Mill Co., and *for mail*, 169 Buckingham St., Waterbury, Conn.
- SUMNER, Eliot (1910), King St., Northumberland, Pa.
- SUMNER, Henry W. (1900; 1912), Mech. Engr., 14 W. Connecticut St., and *for mail*, 1643 Federal Ave., Seattle, Wash.
- SUNSTROM, Karl J. (1884), Cons. Engr., Odengaten 92, Stockholm, Sweden.
- SUPLEE, Henry Harrison (1888), Manager, 1897-1900; Pres., Cassier Magazine Co., and Editor Cassier's Magazine, 12 W. 31st St., and 203 W. 81st St., New York, N. Y.
- SUPPES, Max M. (1890), The Natl. Tube Co., Lorain, O.
- SUTER, George A. (1883; 1893), Pres., G. A. Suter & Co., 112 Wooster St., and *for mail*, 190 Riverside Drive, New York, N. Y.
- SUTHERLAND, James I. (Junior, 1909), Estimator, Stand. Steel Car Co., and *for mail*, 559 Third St., Butler, Pa.
- SUTTON, Frank (1907), Cons. Engr., 80 Broadway, New York, and Babylon, L. I., N. Y.
- SVENSEN, Carl Lars (Junior, 1911), Instr. Mech. Engrg., Tufts College, Tufts College P. O., Mass.
- SVENSON, John A. F. (1888), Mech. Engr., Oliver Bldg., Pittsburgh, Pa.
- SVENSSON, Johan Alfred (1909), Ingle Mch. Co., 371 St. Paul St., and 246 Park Ave., Rochester, N. Y.
- SWAIN, George F. (1883), Cons. Engr., Mem. Boston Transit Com., Cons. Engr., Mass. R. R. Com., Prof. Civ. Engrg., Graduate Sch. Applied Science, Harvard Univ., Pierce Hall, Oxford St., and 435 Marlboro St., Cambridge, Mass.
- SWAN, John Joseph (1899; 1909), The Oil Power Engrg. Corp., New York, N. Y., and Plainfield, N. J.
- SWANBERG, F. L. (Junior, 1902), Secy., D. T. Williams Valve Co., and 2033 Francis Lane, Cincinnati, O.
- SWARTS, Guy Taylor (Junior, 1909), Repair Wk. Open Hearth Dept., Cambria Steel Co., and *for mail*, 132 Erie St., Johnstown, Pa.
- SWARTWOUT, Everett W. (Junior, 1910), Mgr. Chicago Office, Nordberg Mfg. Co., 1504 Fisher Bldg., Chicago, Ill.
- SWASEY, Ambrose (1880), Vice-President, 1900-1902; President, 1904; Pres., The Warner & Swasey Co., and 7808 Euclid Ave., Cleveland, O.
- SWEENEY, John M. (1885), Mech. Engr., 1636 Monadnock Bldg., and 5660 Madison Ave., Chicago, Ill.
- SWEET, Charles E. (1907), Treas., Superior Mch. & Engrg. Co., 51-53 Fort St., E., and *for mail*, 135 Taylor Ave., Detroit, Mich.
- SWEET, Ernest E. (1911), Cons. Mech. Engr. and Ch. Engr., Cadillac Motor Car Co., and *for mail*, 195 Chandler Ave., Detroit, Mich.
- SWEET, Franklin (Junior, 1903), 603 E. Main St., Portland, Ore.

- SWEET, John E. (1880; Honorary, 1904), President, 1884; Manager, 1880-1883; Pres., Straight Line Eng. Co., and 114 Merriam Ave., Syracuse, N. Y.
- SWENSON, Bernard Victor (1903), Barron G. Collier, Inc., 175 Fifth Ave., New York, N. Y.
- SWIGGETT, Clayton Andrew (Junior, 1912), Draftsman and Designer, The Iola Portland Cement Co., and *for mail*, 423 South St., Iola, Kan.
- SWITZER, John Albert (1912), Prof. Hyd. Engrg., Univ. of Tenn., and Hyd. Engr., Tenn. State Geological Survey, Knoxville, Tenn.
- SYMONDS, George P. (1908), Constr. Engr., Alberger Pump & Condenser Co., 140 Cedar St., New York, N. Y.
- SYMONDS, Nathaniel Gardiner (Junior, 1905), Sales Mgr. Chicago Dist., The Westinghouse Mch. Co., 1406 N. Y. Life Bldg., Chicago, Ill.
- SYMONS, Wilson E. (1899), Cons. Engr., 900 Postal Tel. Bldg., and Grand Pacific Hotel, Chicago, Ill.
- SZE, S. C. Thomas (Junior, 1905), Imperial Rys. of North China, Tongshau, China.
- TABER, George H. (1894), Genl. Mgr., Gulf Refining Co., Frick Bldg. Annex, Pittsburgh, and 136 W. Swissvale Ave., Edgewood, Pittsburgh, Pa.
- TABOR, Leroy (1909), The Tabor Mfg. Co., 18th and Hamilton Sts., and 2513 S. Garnet St., Philadelphia, Pa.
- TADDIKEN, J. F., Jr. (Junior, 1907), Engr., Am. Beet Sugar Co., Rock Ford, Colo.
- TAFT, Theodore Howard (1903; 1910), Asst. Prof. Mech. Engrg., Mass. Inst. of Tech., Boston, and 1 Avon Pl., Cambridge, Mass.
- TAGGE, Arthur C. (1901), Genl. Supt., Canada Cement Co., Ltd., Montreal, and 440 Strathcona Ave., Westmount, P. Q., Canada.
- TAIT, Godfrey M. S. (1906; 1907), Cons. Engr., 1413 G St., N. W., res., 2016 O St., N. W., Washington, D. C.; also, 90 West St., New York, N. Y.
- TAIT, Roderick H. (1904), Pres., Tait-Nordmeyer Engrg. Co., 1214 Liggett Bldg., and 1368 Granville Pl., St. Louis, Mo.
- TAKEO, Toshisuke (1908), Cons. Engr., Takeuchi Min. Co., (Genl. Mgr., Karatsu Iron Wks., Nishi-Karatsu, Hizen, Japan.
- TALBOT, Clifford (1912), 12 Third St., Ilion, N. Y.
- TALLMADGE, Webster (Junior, 1911), Erecting Engr. Steam Turbines, Westinghouse Mch. Co., 165 Broadway, New York, and *for mail*, 1312 54th St., Brooklyn, N. Y.
- TALLMAN, Frank G. (1881), Manager, 1905-1908; Dir. of Purchases, E. I. du Pont de Nemours Powder Co., du Pont Bldg., and 1102 Broome St., Wilmington, Del.
- TARBOX, George Roger (1912), Engr., Stanley G. Flagg & Co., Stowe, and *for mail*, 121 N. Hanover St., Pottstown, Pa.
- TATE, John M., Jr. (Associate; 1907), Pres., Tate, Jones & Co., Inc., 1007 Empire Bldg., Pittsburgh, and Sewickley, Pa.

- TAYLOR, Alexander (1907), Mgr. of Wks., Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa.
- TAYLOR, Cecil Hamelin (Associate, 1908), Cons. Engr., Taylor & Neuteboom, 518-520 Broadway Central Bldg., Detroit, Mich.
- TAYLOR, Clarence L. (1904), Ch. Engr., Morgan Engrg. Co., and *for mail*, 653 S. Union Ave., Alliance, O.
- TAYLOR, Frank H. (1908), Dir. and Genl. Mgr., Linotype Mchy., Ltd., 188 Fleet St., London, England, and *for mail*, 44 E. 82d St., New York, N. Y.
- TAYLOR, Frederick W. (1886), Vice-President, 1904-1905; President, 1906; Cons. Engr., Highland Sta., Chestnut Hill, Philadelphia, Pa.
- TAYLOR, George W. K. (1907), 104-106 John St., New York, N. Y.
- TAYLOR, Harvey Birchard (Junior, 1910), Hyd. Engr., I. P. Morris Co., Beach and Ball Sts., Philadelphia, and 6718 Quincy St., Germantown, Philadelphia, Pa.
- TAYLOR, J. Hall (1912), Secy. and Genl. Mgr., Am. Spiral Pipe Wks., and *for mail*, P. O. Box 485, Chicago, Ill.
- TAYLOR, John T. (1891), Supt., 156 Fifth Ave., New York, N. Y.
- TAYLOR, John Wallace (1909; 1910), Asst. Wks. Mgr., The Crittall Mfg. Co., Braintree, and *for mail*, Lynmouth, St. Peter's Walk, Bocking, Essex, England.
- TAYLOR, Percy B. (1909), Cons. Engr., 196 Market St., and 57 S. 11th St., Newark, N. J.
- TAYLOR, Stevenson (1886), Vice-President, 1899-1901; V. P., Quintard Iron Wks. Co., 742 E. 12th St., New York, N. Y.
- TAYLOR, Warren H. (1889), Supt. Bank Lock Dept., Yale & Towne Mfg. Co., and *for mail*, Ripawam Pl., Stamford, Conn.
- TAYLOR, Wm. M. (1888; 1904), Pres., Chandler & Taylor Co., S. Addison St., and 2426 E. Washington St., Indianapolis, Ind.
- TAYLOR, Wyatt W. (Associate, 1908), Engrg. Dept., Am. Can Co., 447 W. 14th St., New York, and *for mail*, Spuyten Duyvil, N. Y.
- TEACH, Jacob Arthur (1912), Checker and Designer, Minneapolis Steel & Mchy. Co., Minneapolis, and *for mail*, 1265 Laurel Ave., St. Paul, Minn.
- TEAGUE, Walter Owen (1912), Engr. and Inspr., Associated Factory Mutual Fire Ins. Cos., 31 Milk St., Boston, Mass.
- TEELE, Fred W. (1904), Genl. Mgr., Porto Rico Rys. Co., Ltd., San Juan, Porto Rico.
- TEN BROECK, Floyd G. (1903), Cons. Engr., Fifth Ave. Bldg., 200 Fifth Ave., New York, and 1421 Glenwood Rd., Brooklyn, N. Y.
- TENNEY, Albert Ball (1896; 1904), V. P., Malden Elec. & Suburban Gas & Elec. Co., and others, 201 Devonshire St., Boston, and Lexington, Mass.
- TENNEY, Edward Henry (1912), Asst. to Ch. Engr. of Power Plants, Union Elec. Light & Power Co., 12th and Locust Sts., and *for mail*, 1418 Goodfellow Ave., St. Louis, Mo.
- TENNEY, Theodore Smith (1910), Nygren, Tenney & Ohmes, 87 Nassau St., New York, N. Y., and Riveredge, N. J.

- TERRELL, Cary D. (Junior, 1901), Sales Agt., Am. Car & Fdy. Co., 915 Olive St., St. Louis, Mo.
- TERRY, Charles D. (1902; 1908), Asst. to Genl. Supt., Natl. Tube Co., 1706 Frick Bldg., Pittsburgh, and *for mail*, 1123 South Ave., Wilksburg, Pa.
- TERWILLIGER, Gerald Edgar (Junior, 1910), Pat. Lawyer; Managing Editor, The Stevens Indicator, 1 Liberty St., New York, N. Y., and 28 Fabyan Pl., Newark, N. J.
- TERWILLIGER, Harry L. (Associate, 1901), First V. P., Harron, Rickard & McCone, 139-149 Townsend St., San Francisco, and *for mail*, 1121 Emerson St., Palo Alto, Cal.
- THAYER, Robert Ellis (Junior, 1911), Assoc. Mech. Editor, Railway Age Gazette, and American Engineer, Transportation Bldg., Chicago, Ill.
- THIEMER, William H. (1911), M. M., Winton Motor Car Co., Berea Rd., and *for mail*, 9517 Willard Ave., Cleveland, O.
- THOMA, Charles, Jr. (Junior, 1910), Supt. Die Dept., E. W. Bliss Co., Brooklyn, N. Y., and *for mail*, 15 Eighth St., Carlstadt, N. J.
- THOMA, Walter (Junior, 1910), Ch. Mech. Inspr., E. W. Bliss Co., Brooklyn, N. Y., and *for mail*, 15 Eighth St., Carlstadt, N. J.
- THOMAS, Carl C. (1908), Prof. Steam and Gas Engrg., Univ. of Wis., and 166 Prospect Ave., Madison, Wis.
- THOMAS, Charles W. (1888), Asst. Prof. Mech. Dept., Columbia Univ., New York, N. Y., and Warren Ave., Palisade, N. J.
- THOMAS, David G. (1909), Ch. Engr., Denver Union Water Co., Denver, Colo.
- THOMAS, Edward G. (1890; 1907), Mech. Engr., The Boss Mfg. Co., Kewanee, Ill.
- THOMAS, Edward W. (1880), Agt., Boott Mills, and *for mail*, 111 Stevens St., Lowell, Mass.
- THOMAS, Fred H. (Junior, 1909), Sales Engr., The C. & G. Cooper Co., Mt. Vernon, O.
- THOMAS, George Carlyle (Junior, 1907), Asst. Supt., Singer Mfg. Co., Factory 10, and *for mail*, 224 Ogden St., Bridgeport, Conn.
- THOMAS, Glegge (Junior, 1910), B. F. Sturtevant Co., 1006 Loan and Trust Bldg., Washington, D. C.
- THOMAS, Horace T. (1909), Ch. Engr., Reo Motor Car Co., and 1100 Michigan Ave., E., Lansing, Mich.
- THOMAS, James Winthrop (1905), Engr., The United Gas & Elec. Corp., 40 Wall St., New York, N. Y.
- THOMAS, Jay G. (Junior, 1906), Engrg. Dept., Westinghouse Mch. Co., East Pittsburgh, and *for mail*, 844 Rebecca Ave., Wilksburg, Pa.
- THOMPSON, Albert W. (1900; 1907), Supt., Saco-Lowell Shops, and 129 Fairmount St., Lowell, Mass.
- THOMPSON, Byron Lyman (Associate, 1908), Asst. Mgr. Caustic Soda Dept., Solvay Process Co., and *for mail*, 212 Erie St., Syracuse, N. Y.
- THOMPSON, David (1905), Min. and Cons. Engr., P. O. Box 9, Castlemaine, Victoria, Australia.

- THOMPSON, Edward C. (Junior, 1909), Genl. Mgr., Victor Tire Traction Co., 16 State St., Boston, and *for mail*, 96 Geneva Ave., Dorchester, Mass.
- THOMPSON, Edward P. (1884), Registered Pat. Atty. and Cons. Engr., 34 E. 32d St., New York, N. Y., and Victor Bldg., Washington, D. C.
- THOMPSON, Erwin W. (1884), Mgr., The Observer Co., Charlotte, N. C.
- THOMPSON, Herbert Leslie (Junior, 1912), Engrg. Dept., The Deane Steam Pump Co., Holyoke, Mass.
- THOMPSON, Hugh L. (1894), Waterbury, Conn.
- THOMPSON, O. C. (Associate, 1910), Mech. Engr., Healy Box Corp., 105 W. 40th St., and *for mail*, 333 W. 58th St., New York, N. Y.
- THOMPSON, S. K. (Associate, 1900), Thompson Engrg. Co., 1011 Filbert St., Philadelphia, and *for mail*, Jenkintown, Pa.
- THOMPSON, Sanford E. (1909), Cons. Engr., Odd Fellows Bldg., Newton Highlands, and Oliver Bldg., 141 Milk St., Boston, Mass.
- THOMSON, Francis du Pont (1892; 1899), Cons. Engr., Wheeling Mold & Fdy. Co., and Highland Park, Wheeling, W. Va.
- THOMSON, John (1887), Manager, 1892-1895; Pres., John Thomson Press Co., 253 Broadway, and Hotel St. Andrew, 72d St. and Broadway, New York, N. Y.
- THOMSON, J. Stewart (Junior, 1901), Mgr. Gas Eng. Dept., Internatl. Steam Pump Co., 115 Broadway, New York, N. Y., and *for mail*, P. O. Box 292, Little Falls, N. J.
- THOMSON, John Edgar (Junior, 1911), V. P. and Treas., John Thomson Press Co., 253 Broadway, and 65 Park Ave., New York, N. Y.
- THOMSON, T. Kennard (1907), Cons. Engr., Hudson Terminal Bldg., 50 Church St., New York, and Yonkers, N. Y.
- THORKELOSON, Halsten Joseph (1911), Assoc. Prof. Steam Engrg., Univ. of Wis., and *for mail*, 1526 W. Washington Ave., Madison, Wis.
- THORN, Charles Norman (Associate, 1910), V. P., Allied Mchy. Co. of Am., 3 rue Paul Dubois, Paris, France.
- THORNE, Wm. H. (1884), Engr., Wm. Sellers & Co., 1600 Hamilton St., Philadelphia, and *for mail*, 221 Gowen Ave., Mt. Airy, Philadelphia, Pa.
- THORNLEY, Fred Curtis (1912), Genl. Supt., Robins Conveying Belt Co., Passaic, N. J.
- THORNTON, William F. (1909), 1315 Waucoma St., Birmingham, Ala.
- THORNTON, Wm. Mynn (1900), Prof. Applied Mathematics, and Dean Dept. of Engrg., Univ. of Va., Charlottesville, Va.
- THORP, Frederick P. (Junior, 1902), Power & Min. Mchy. Co., 115 Broadway, New York, N. Y.
- THORP, George G. (1892; 1904), Second V. P., Ill. Steel Co., and V. P., Ind. Steel Co., Commercial Natl. Bank Bldg., Chicago, and 1012 Lake Shore Drive, Evanston, Ill.

- THORPE, Robt. H. (1897), Mansion House Bldg., 4 Queen Victoria St., London, E. C., and The Birches, Sevenoaks, Kent, England.
- THROCKMORTON, George Kenneth (Junior, 1911), Mgr. Dept. of Engrg. and Drafting, Sears, Roebuck & Co., and *for mail*, 3854 Gladys Ave., Chicago, Ill.
- THULLEN, L. H. (1905), Ch. Engr., Triumph Elec. Co., and *for mail*, 2873 Linwood Rd., Hyde Park, Cincinnati, O.
- THUMAN, Frederic (1900), Life Member; Dir., Humphreys & Glasgow, Ltd., 36-38 Victoria St., Westminster, London, S. W., and 31 Campden Hill Court, Kensington, London, W., England.
- THURMAN, Charles Ross (1911), Ch. Engr., Elec. Renovator Mfg. Co., and *for mail*, 431 Amberson Ave., Pittsburgh, Pa.
- THURN, Theodore (1904; 1909), Engr., Genl. Elec. Co., 23 Water St., Yokohama, Japan.
- THURSTON, Edward D., Jr. (1909; 1912), Instr. Dept. Mech. Engrg., Columbia Univ., and *for mail*, 511 W. 113th St., New York, N. Y.
- THURSTON, George H. (1902), Elec. and Mech. Engr., Consldt. Goldfields of South Africa, 8 Old Jewry, London, E. C., England.
- TIBBALS, Geo. A. (1897), Secy. and Treas., Continental Iron Wks., and *for mail*, 148 Milton St., Brooklyn, N. Y.
- TIFFT, Robert Hull (Junior, 1910), 196 Linwood Ave., Buffalo, N. Y.
- TILDEN, James A. (1885), Genl. Mgr., Hersey Mfg. Co., South Boston, and 66 Beacon St., Hyde Park, Mass.
- TIMBIE, William H. (1912), Head of Dept. of Applied Science, Wentworth Inst., Boston, and 524 Watertown St., Newtonville, Mass.
- TIMMIS, Walter S. (1906), Cons. Engr., Marbridge Bldg., 47 W. 34th St., New York, and Avondale St., Brooklyn Manor, Woodhaven, L. I., N. Y.
- TIPLADY, John T. (1909), Canadian Westinghouse Co., Hamilton, Ont., Canada.
- TIPTON, William Howard (Junior, 1912), Steam Engr. Mingo and Bellaire Wks., Carnegie Steel Co., Mingo Junction, and *for mail*, Y. M. C. A. Bldg., Steubenville, O.
- TISCHNER, Charles F., Jr. (Junior, 1903), Pat. Atty., 149 Broadway, New York, N. Y.
- TITCOMB, George E. (1908), East Branch Sales Mgr., The McMyler Interstate Co., Rm. 1756, 50 Church St., New York, and 51 Hamilton Ave., New Rochelle, N. Y.
- TJEENK-WILLINK, William August (1912), Mech. Engr. in Charge Drafting Office, Arbuckle Bros. Sugar Refinery, foot of Jay St., and *for mail*, 540 Eighth St., Brooklyn, N. Y.
- TOBEY, Wm. L. (1890), Prop., Thermex Silencer Wks., 9 Lewis St., East Boston, and *for mail*, 74 Washington Ave., Winthrop, Mass.
- TOBIN, Robert P. (1909), Ch. Tech. Dept., Vacuum Oil Co., 49 Federal St., Boston, Mass.

- TODD, James (1911), Pres. and Ch. Engr., The Sterling Varnish Co., Pittsburgh, Pa.
- TODD, Robert I. (1907), Pres. and Genl. Mgr., Indianapolis Traction & Terminal Co., Indianapolis, Ind.
- TOLMAN, James P. (1894), Pres., Samson Cordage Wks., 88 Broad St., Boston, and *for mail*, 84 Highland St., West Newton, Mass.
- TOLTZ, Max (1904), 1614 Pioneer Press Bldg., and 433 Holly Ave., St. Paul, Minn.
- TOMLINSON, Charles E. (Associate, 1908), Smith Premier Type-writer Co., Syracuse, N. Y.
- TOMLINSON, Royal Drew (1912), Danbury, Conn.
- TOMPKINS, Stonewall (1887; 1890), Ch. Engr., C. I. and B. R. R. Co., 259 Franklin Ave., Brooklyn, N. Y.
- TOMPKINS, Samuel D. (Associate, 1898), Pres., Smooth-On Mfg. Co., 572 Communipaw Ave., and 533 Communipaw Ave., Jersey City, N. J.
- TONER, Edward Joseph, Jr. (Junior, 1912), Mech. Draftsman, Link-Belt Co., Hunting Park Ave. and Reading R. R., and *for mail*, 3550 N. 15th St., Philadelphia, Pa.
- TORRANCE, Chas. Everett (Junior, 1909), Treas. and Mech. Engr., Northampton Emery Wheel Co., Leeds, and *for mail*, 49 Kensington Ave., Northampton, Mass.
- TORRANCE, Henry, Jr. (1897; 1902), V. P. and Treas., Carbon-dale Mch. Co., 50 Church St., New York, N. Y., and Tenafly, N. J.
- TORRANCE, Kenneth (1885; 1893), Mech. Engr., Genl. Elec. Co., and 1 State St., Schenectady, N. Y.
- TORREY, Herbert Gray (1890), Life Member; Assayer and Metallurgist, Rm. 309, 10 Wall St., New York, N. Y., and Stirling, Morris Co., N. J.
- TOWER, Daniel W. (1900; 1907), Pres., Grand Rapids Brass Co., 90 Scribner Ave., N. W., and 907 Jefferson Ave., Grand Rapids, Mich.
- TOWL, Forrest M. (1890), Cons. Engr., Pres., So. Pipe Line Co., 26 Broadway, New York, and 794 Carroll St., Brooklyn, N. Y.
- TOWLE, William Mason (1887), Life Member; Prof. of Industrial Engrg., Clarkson Memorial Sch. of Tech., and *for mail*, 76 Main St., Potsdam, N. Y.
- TOWN, Frederic E. (1905), Local Mgr., Otis Elev. Co., Keenan Bldg., Pittsburgh, and 1123 Walnut St., Wilkesburg, Pa.
- TOWNE, Henry R. (1882), President, 1889; Vice-President, 1884-1886; Life Member; Pres., Yale & Towne Mfg. Co., Stamford, Conn., and *for mail*, 121 Madison Ave., New York, N. Y.
- TOWNE, Thos. (Associate, 1895), Genl. Mgr. of Sales, Union Drawn Steel Co., Beaver Falls, Pa.
- TOWNSEND, Albert Cooley (Junior, 1910), Ch. Draftsman Fan Dept., Green Fuel Economizer Co., Matteawan, N. Y.
- TOWNSEND, David (1882), Vice-President, 1899-1901; Mech. and Cons. Engr., 1716 Spring Garden St., and *for mail*, 1723 Wallace St., Philadelphia, Pa.

- TOWNSEND, Harry P. (Junior, 1904), Secy. and Genl. Mgr., H. P. Townsend Mfg. Co., 10 Hoadley Pl., and 47½ Tremont St., Hartford, Conn.
- TRACY, Harmon Northrop (1912), Engr. and Prop., The H. N. Tracy Co., 701 Central Bldg., Los Angeles, and 5333 Loma Linda Ave., Hollywood, Cal.
- TRACY, Lyndon Sanford (Junior, 1900), Mgr. Soda Ash Dept., Solvay Process Co., and Brattle Rd., Syracuse, N. Y.
- DE TRAMPE, J. Adam C. L. (1904), 1703 Spruce St., Philadelphia, Pa.
- TRASK, Walter H., Jr. (Junior, 1908), Sales Mgr., Idaho Oregon Light & Power Co., Boise, Idaho.
- TRAUTSCHOLD, Reginald (Junior, 1904), Mech. Engr., Cons. Engr., 22 E. 10th St., New York, N. Y.
- TRAUTWEIN, Alfred P. (1884), V. P., Am. Welding Co., Carbondale, Pa.
- TRAVER, Wilber H. (Associate, 1904), Mgr. Min. and Contract Dept., Chicago Pneu. Tool Co., 1010 Fisher Bldg., Chicago, Ill.
- TREAT, Charles Henry (Junior, 1895), Am. Blower Co., Detroit, and *for mail*, R. F. D. No. 1, Box 41, Honor, Mich.
- TREAT, Sidney Wellington (Junior, 1911), Mech. Engr., Babcock & Wilcox Boiler Co., and *for mail*, 219 Ave. A, Bayonne, N. J.
- TREFTS, John C. (1909), Farrar & Trefts, 54-56 Perry St., Buffalo, N. Y.
- TREGELLES, Henry (1888), Bartolmé Mitre 544, Buenos Aires, and Hurlingham F. C. Pacifico, Buenos Aires, Argentine Republic, S. A.
- TREMAINE, E. G. (1889), Automatic Weighing Mch. Co., 136 Commerce St., Newark, and Hackensack, N. J.
- TRIBE, James (1889), Allis-Chalmers Co., and *for mail*, 575 Murray Ave., Milwaukee, Wis.
- TRIBKEN, Charles W. (1912), Ch. Engr., Automatic Sprinkler Co. of Am., 123 William St., New York, and 679 Vanderbilt Ave., Brooklyn, N. Y.
- TRINKS, W. (1905), Prof. Mech. Engrg., Carnegie Inst. of Tech., and 1410 Denniston Ave., Pittsburgh, Pa.
- TROTH, P. Howard (1903), Genl. Sales Mgr., The Fairbanks Co., 416 Broome St., New York, N. Y., and 1070 Hillside Ave., Plainfield, N. J.
- TROTZ, J. O. Emanuel (1906), Managing Dir., Kockums Jernverks, Aktb., Kallinge, and *for mail*, Svanevik, Ronneby, Sweden.
- TROUTMAN, Howard Ellsworth (Associate, 1906), Asst. Sales Mgr., Internatl. Steam Pump Co., 770 Old Colony Bldg., and *for mail*, 4448 Prairie Ave., Chicago, Ill.
- TROWBRIDGE, Amasa (1892; 1903), Pres. and Genl. Mgr., The Rhodes Mfg. Co., 32 Union Pl., and *for mail*, 17 Townley St., Hartford, Conn.
- TROWBRIDGE, Francis C. (Junior, 1889), Pres. and Genl. Mgr., The Black-Clawson Co., and 723 Dayton St., Hamilton, O.

- TRUBE, G. A. (1900), Genl. Mgr., Société Anonyme Westinghouse, 7 Rue de Berlin, and 17 Hameau de Boulainvilliers, Paris, France.
- TRUELL, Karl O. (Associate, 1906), 1352 Parkwood Pl., Washington, D. C.
- TRUETTE, Arthur Pierce (Junior, 1911), Power Plant Engr., Goodyear Tire & Rubber Co., and *for mail*, 45 Marshall Ave., Akron, O.
- TRUMP, Charles N. (1888), 1311 W. 13th St., Wilmington, Del.
- TRUMP, Edward N. (1880; 1890), Vice-President, 1905-1907; Genl. Mgr. and Ch. Engr., Solvay Process Co., and V. P., Semet-Solvay Co., and *for mail*, 1912 W. Genesee St., Syracuse, N. Y.
- TUBBY, Charles Walter (1912), Dist. Mgr., Internatl. Steam Pump Co., 703 Commerce Bldg., St. Paul, Minn.
- TUCKER, Edwin D. (1898), Mech. Engr., 39-41 W. 23d St., and 308 W. 104th St., New York, N. Y.
- TUCKER, Frank S. (1905), Engr., 900 Realty Bldg., and 16 W. 5th St., Charlotte, N. C.
- TUFTS, Leonard (1901), Owner of Pinehurst, N. C.
- TURNER, Charles H. (Junior, 1905), Mech. Engr., Osgood Bradley Car Co., and *for mail*, P. O. Box 645, Worcester, Mass.
- TURNER, Charles P. (Associate, 1907), Constr. Foreman, Constr. Dept., Genl. Elec. Co., Schenectady, N. Y.
- TURNER, Charles Prentice (1912), Ch. Engr., Pa. Steel Co., Steelton, and *for mail*, 1042 Rolleston St., Harrisburg, Pa.
- TURNER, William Payson (1900; 1908), Prof. Practical Mech., Purdue Univ., Lafayette, Ind.
- TUSKA, Gustave R. (1900), Cons. Engr., 68 William St., and 121 E. 56th St., New York, N. Y.
- TUTTLE, Irving E. (Junior, 1909), Engr., Westinghouse, Church, Kerr & Co., 10 Bridge St., New York, and *for mail*, Great Neck Sta., N. Y.
- TUTTLE, Walter Irving (Junior, 1908), Secy., Treas. and Asst. Genl. Mgr., Frank Mossberg Co., Attleboro, Mass., and 32 Medway St., Providence, R. I.
- TUTTLE, Willard S. (1900), Pres., Garwood Bronze & Iron Wks., Garwood, N. J., and *for mail*, 15 Cambridge Pl., Brooklyn, N. Y.
- TUTTLE, William B. (1905), V. P. and Genl. Mgr., San Antonio Gas & Elec. Co.; V. P. and Genl. Mgr., San Antonio Traction Co., 305 Houston St., and cor. New Braunfels Ave. and Via Madre, Alamo Heights, San Antonio, Tex.
- TWINING, Wm. S. (1897), Ford, Bacon & Davis, 115 Broadway, New York, N. Y.
- TYBERG, Oluf (1898), Point Loma, Cal.
- TYDEMAN, William A. (Junior, 1909), Secy., Macan Jr. Co., and 856 Meixell St., Easton, Pa.
- TYLER, Chas. C. (1897), Genl. Mgr. of Wks., Remington Arms & Ammunition Co., Ilion, N. Y., and Genl. Mgr. of Wks., The Union Metallic Cartridge Co., and *for mail*, 768 Fairfield Ave., Bridgeport, Conn.

- TYLER, Willard Curtis (Associate, 1908), European Mgr., Keasbey & Mattison Co., 654 Caxton House, Sanctuary, Westminster, London, S. W., England, and 35 Walker St., Cambridge, Mass.
- UEHLING, Edward A. (1883), Life Member; Pres., Uehling Instrument Co., Delaware Ave., and *for mail*, 199 Franklin Ave., Passaic, N. J.
- UHL, William F. (1912), Hyd. Engr. with Charles T. Main, Rm. 819, 201 Devonshire St., Boston, Mass.
- UIHLEIN, William B. (Junior, 1907), Genl. Supt., Jos. Schlitz Brewing Co., Milwaukee, Wis.
- ULBRICHT, T. Carlile (Junior, 1908), Instr. Dept. of Power Engrg., Sibley College, Cornell Univ., and *for mail*, 128 Dryden Rd., Ithaca, N. Y.
- ULMANN, Chas. J. (1886), Mech. Engr., Bernhard Ulmann & Co., 107-113 Grand St., New York, N. Y.
- ULRICH, Max Julius (1906), 570 W. 182d St., New York, N. Y.
- UNGER, John S. (1886), Cons. Engr., 3344 Evanston Ave., Chicago, Ill.
- UNWIN, William Cawthorne (Honorary, 1898), 29 Palace Gate, Kensington, London, W., England.
- UPDEGRAFF, William Barrett (1910), Architectural Tile & Faience Co., Maurer, and 522 Magie St., Elizabeth, N. J.
- UPP, John W. (1903), Mgr. Switchboard Dept., Genl. Elec. Co., and *for mail*, 40 Wendell Ave., Schenectady, N. Y.
- UPSON, Lyman A. (1884), Treas., Upson-Martin Co., Thompsonville, Conn.
- UPSON, Maxwell Mayhew (1901; 1907; 1912), Secy., Ch. Engr. and Genl. Mgr., Raymond Concrete Pile Co., 140 Cedar St., New York, N. Y., and 83 Dwight Pl., Englewood, N. J.
- UPTON, William Bayly (1894), Cons. Engr., Washington Loan and Trust Bldg., 902 F St., N. W., Washington, D. C.
- UTLEY, Joseph Cole (Junior, 1911), Steam and Hyd. Engrg. Dept., Natl. Tube Co., and *for mail*, 1404 Huey St., McKeesport, Pa.
- VAIL, Jesse A. (1909), Genl. Mgr., Fairbanks, Morse Mfg. Co., Beloit, Wis.
- VAILE, J. Henry (1888), Pres. and Treas., Vaile & Kimés, and *for mail*, 119 N. Jefferson St., Dayton, O.
- VALENTINE, Floyd Herbert (Junior, 1912), Constr. Engr. Steam Dept., The Cleveland Elec. Ill. Co., Cleveland, O.
- VALENTINE, Louis Rossiter (Junior, 1907), Day & Zimmermann, 608 Chestnut St., and *for mail*, 1433 N. 16th St., Philadelphia, Pa.
- VALENTINE, Warren P. (Junior, 1904), Engrg. Dept. and Charge of Mech. Drawing Dept., Trades Apprentice Sch. of Westinghouse Elec. & Mfg. Co., East Pittsburgh, and *for mail*, 204 West St., Wilkinsburg, Pa.
- VAN BUSKIRK, Henry C. (1906), Supt. M. P., Colo. & So. Ry., 824 Cooper Bldg., Denver, Colo.

- VAN CLEVE, Horatio Phillips (Junior, 1912), Mech. Engr., Waddell & Harrington, and *for mail*, 2418 E. 46th St., Kansas City, Mo.
- VAN DEINSE, A. F. (Junior, 1905), Mgr., Albuquerque Gas, Elec. Light & Power Co., Albuquerque, New Mex.
- VANDEMOER, John (Associate, 1904), Apartado 63, Chihuahua, Mex.
- VANDERBILT, Aaron (1880; 1884; 1908), Life Member; Remsenburg, L. I., N. Y.
- VANDERBILT, Cornelius (1899; Associate, 1901), 30 Pine St., and *for mail*, 677 Fifth Ave., New York, N. Y.
- VANDERGRIFF, James W. (1909), V. P., So. Pipe Line Co., and *for mail*, 665 W. Chestnut St., Lancaster, Pa.
- VAN DERHOEF, Geo. Nixon (1893; 1898), East. Cons. Engr., Dodge Mfg. Co., 21 Murray St., New York, N. Y., and Arlington, N. J.
- VAN DERVORT, Adrian O. (Junior, 1900), Supt., Hammett Mch. Wks., and *for mail*, 90 Oakwood Ave., Troy, N. Y.
- VANDER WILLIGEN, T. A. (1896; 1904), Rep., Humphreys & Glasgow, Ltd., 209 Chaussée d'Ixelles, Brussels, Belgium.
- VAN DUZEE, Harold (Junior, 1885), Cons. Engr., 427 Walnut St., Philadelphia, Pa.
- VAN KEUREN, E. B. (Junior, 1912), Mech. Engr., 1905 Am. Trust Bldg., and 1318 S. 20th St., Birmingham, Ala.
- VAN PATTEN, William Ensign (1910), Superintending Power and Light Plants, M. & E. Div., D. L. & W. R. R., Hoboken, and *for mail*, 212 William St., Boonton, N. J.
- VAN TRUMP, Charles R. (1893; 1898), Life Member; 305 W. 8th St., Wilmington, Del.
- VAN VALKENBURGH, R. D. (1901; 1905; 1911), Branch Mgr., Colonial Steel Co., 213 W. Lake St., and *for mail*, Hotel Ontario, 620 N. State St., Chicago, Ill.
- VAN VOORHIS, Frederick Springer (Junior, 1912), 19 Maple Ave., Madison, N. J.
- VAN WINKLE, Edward (1904; 1908), Cons. Pat. Engr., West St. Bldg., Cedar and West St., New York, and The Stuyvesant, 483 Park Pl., Brooklyn, N. Y.
- VAN WINKLE, Herbert H. (Junior, 1906), Mech. Engr., John H. McGowan Co., 54 Central Ave., Cincinnati, O.
- VAN ZANDT, Paul C. (1900; 1907; 1909), Mech. Engr., Allis-Chalmers Co., 2025 Peoples Gas Bldg., Chicago, and 299 N. Franklin Ave., River Forest, Ill.
- VARNES, Samuel K. (Junior, 1910), Exper. Engr., Pa. Steel Co., Steelton, and *for mail*, 1904 Market St., Harrisburg, Pa.
- VARNEY, Frank Hastings (1909), Engr., Pacific Gas & Elec. Co., 1095 Market St., and 977 Green St., San Francisco, Cal.
- VARNEY, Wm. Wesley (1892), Mech. Engr. and Atty-at-Law, 1221 Calvert Bldg., St. Paul and Fayette St., and *for mail*, 710 N. Carey St., Baltimore, Md.
- VAUCLAIN, Andrew C. (1912), Genl. Supt., Southwark Fdy. & Mch. Co., Washington Ave. and 5th St., Philadelphia, Pa.

- VAUCLAIN, Samuel M. (1894), Vice-President, 1904-1906; V. P., The Baldwin Loco. Wks., 500 N. Broad St., Philadelphia, and Rosemont, Pa.
- VAUGHAN, Aubrey W. (Junior, 1912), Industrial Engr., Am. Optical Co., and *for mail*, 50 Hamilton St., Southbridge, Mass.
- VAUGHAN, Henry H. (1899), Vice-President, 1910-1912; Asst. to V. P., Canadian Pacific Ry., and 8 Weredale Park, Montreal, P. Q., Canada.
- VAUGHAN, John Alfred (1902), Ch. Inspr. Mchy., Box 1132, Johannesburg, Transvaal, S. A.
- VEAL, C. B. (1907; 1912), Prof. Mch. Design, Purdue Univ., Lafayette, and *for mail*, 633 Russell St., West Lafayette, Ind.
- VEEDER, Curtis H. (1888; 1897), Pres., Veeder Mfg. Co., 28 Sargeant St., Hartford, Conn.
- VEHSLAGE, Harold Edwin (Junior, 1912), Mech. Engr., Am. Cotton Oil Co., and *for mail*, 104 W. 70th St., New York, N. Y.
- VEIT, Richard C. (1891), Secy., Stand. Oil Co. of N. Y., 26 Broadway, and 171 W. 71st St., New York, N. Y.
- VEITCH, Thomas (Junior, 1901), Cons. Auto. Engr., 1784 Broadway, and *for mail*, 961 St. Nicholas Ave., New York, N. Y.
- VENESS, Alfred E. (1911), Supt., The Internatl. Register Co., 625 W. Jackson Blvd., Chicago, and *for mail*, Warwick Ave., Kenilworth, Ill.
- de VERASTEGUI, Albert (1889), Mgr. Export Dept., Babcock & Wilcox Co., 85 Liberty St., New York, and Dobbs Ferry, N. Y.
- VERNER, William Franklyn (Junior, 1912), Instr. Mech. Engrg., Univ. of Mich., and *for mail*, 908 Lincoln Ave., Ann Harbor, Mich.
- VERNON, Percy Venables (1906), Engr. and Dir., Alfred Herbert, Ltd., Coventry, and *for mail*, Penvorn, Manor Rd., Coventry, England.
- VIALI, William A. (Associate, 1902), Secy., Brown & Sharpe Mfg. Co., Providence, R. I.
- VICK, Augustas Theodore (1911), Elec. and Mech. Engr., Overland, St. Louis Co., Mo.
- VICKESS, Samuel (1901), Cons. Engr., 129 Front St., and 151 W. 70th St., New York, N. Y.
- VICTOREEN, Ernest Vitalis (1910), Supt. Shops, Tenn. Coal, Iron & R. R. Co., Ensley, and *for mail*, 2233 Arlington Ave., Birmingham, Ala.
- VIDETO, Theodore N. (Junior, 1912), Treas. and Mgr., Melvern Milling & Fruit Co., Ltd., and *for mail*, Melvern Square, Nova Scotia, Canada.
- VINCENT, Arthur S. (Associate, 1908), Cons. Engr. and Supt., Belnord Apts., 86th St. and Broadway, New York, N. Y.
- VINCENT, Jesse Gurney (1908; 1910), Ch. Engr., Packard Motor Car Co., East Grand Blvd., and 69 Massachusetts Ave., Detroit, Mich.

- VIOLA, Bartholomew (1901), Cons. Engr., 140 Liberty St., New York, N. Y., and Belle Mead, N. J.
- VOGT, Robert Friedrich (1911), Mech. Engr. Cons. Engrg. Dept., Allis-Chalmers Co., and *for mail*, 233 Queen Anne Pl., Milwaukee, Wis.
- VOIGHT, Henry Gustave (1908), Asst. Genl. Supt., Russell & Erwin Mfg. Co., and *for mail*, P. O. Box 406, New Britain, Conn.
- von AMMON, Siegfried (1904; 1905), Fontella, Va.
- von BAYER, August H. (1912), Supt., Ky. Solvay Coke Co., Ashland, Ky.
- von GOEBEN, Carl (1899), Wks. Mgr., The Payne & Joubert Mch. & Fdy. Co., and *for mail*, 1726 15th Ave., S., Birmingham, Ala.
- von Miller, Dr. ing. Oskar (Honorary, 1912), Reichsrat, Pres., Deutsches Museum, Ferdinand Millerplatz 3, Munich, Germany.
- von PHILP, C. (1890), Mgr. Mchy. Dept., Bethlehem Steel Co., South Bethlehem, and Bethlehem, Pa.
- Von PHUL, Gilbert D. (1912), Contr. Mech. Engr., Sugar and Genl. Mchy., 322 Hibernia Bank Bldg., New Orleans, La.
- von PHUL, William (1907), Member of Firm, Ford, Bacon & Davis, 921 Canal St., and *for mail*, 496 Audubon St., New Orleans, La.
- VOORHEES, Gardner Tufts (1900), Refrig. Engr., Engrs' Club, 32 W. 40th St., New York, N. Y.
- VOSBURY, W. DeWitt (1911), Mech. Engr., P. O. Bldg., Darby, and *for mail*, Sharon Hill, Pa.
- VOSE, Clarence (1891), Bellport, L. I., and Brooklyn, N. Y.
- VOSE, Fred Hale (1906; 1910), Assoc. Prof. Mech. Engrg. in Charge of Dept., Case Sch. of Applied Science, and *for mail*, 9912 Newton Ave., Cleveland, O.
- WACHS, Theodore (Junior, 1911), Mech. Engr., Sears, Roebuck & Co., Bradley, and *for mail*, 282 Rosewood Ave., Kankakee, Ill.
- WADDELL, Charles E. (1903; 1907), Cons. Engr., 78 Patton Ave., Asheville, N. C.
- WADDELL, George F. (Associate, 1898), Supt. of Concentrator, Steptoe Valley Smelting & Min. Co., McGill, Nev.
- WADLEIGH, George R. (1907), Engr., Bemis Bros. Bag Co., 601 S. 4th St., St. Louis, and 32 Maple Ave., Webster Groves, Mo.
- WADSWORTH, Frank L. O. (1903), Cons. Engr., and Pres., Miller Non-Corrosive Metal Co., 1347-1348 Oliver Bldg., 1801-1802 Commonwealth Blvd., and Duquesne Club, Pittsburgh, Pa.
- WADSWORTH, George Reed (1910), Asst. to Pres., Peerless Motor Car Co., Cleveland, O.
- WADSWORTH, R. Hollis (1912), 68 Clinton St., Seneca Falls, N. Y.
- WAERN, A. W. (1908), Cons. Engr., Jos. H. Wallace & Co., Temple Court Bldg., New York, N. Y.

- WAGNER, Emilio F. (1891), Engr., Coca 76, Lima, Peru, S. A.
- WAGNER, Frank C. (1895), Prof. Mech. and Elec. Engrg., Rose Poly. Inst., and *for mail*, 1111 S. 6th St., Terre Haute, Ind.
- WAINWRIGHT, Lucius M. (1907), Pres., Diamond Chain & Mfg. Co., 241 W. Georgia St., and 1851 N. Penna St., Indianapolis, Ind.
- WAIT, Henry Heileman (1905), Pres., Rateau Turbine Co., 215 Wabash Ave., and *for mail*, 4919 Madison Ave., Chicago, Ill.
- WAITE, Edward B. (Associate, 1902), Head Instr. Dept., Am. Sch. of Corr., 58th St. and Drexel Ave., Chicago, Ill.
- WAITT, Arthur M. (1893), Vice-President, 1900-1902; Pres., Stand. Third Rail Co., Cons. Engr., Rm. 1417, 165 Broadway, New York, N. Y., and Landheim, Sharon, Conn.
- WALDO, Leonard (1894), Cons. Engr., 802 Atlantic Bldg., 49 Wall St., New York, N. Y., and *for mail*, 640 W. 8th St., Plainfield, N. J.
- WALDRON, Frederick A. (1890; 1896), Industrial Engr., Rm. 2200, 37 Wall St., New York, N. Y., and 808 Hillside Ave., Plainfield, N. J.
- WALES, Chas. M. (1890), Agt., Cleveland City Forge & Iron Co., 11 Broadway, and 410 Riverside Drive, New York, N. Y.
- WALKER, Charles Albert (Junior, 1912), Teaching Mech. Engrg., London Co. Council Sch. of Engrg. and Navigation, High St., Poplar, E., and 53 Whittington Rd., Bowes Park, N., London, England.
- WALKER, Emery Lafayette (1910), East. Mgr., Pacific Coast Condensed Milk Co., Berlin, Wis.
- WALKER, Frank A. (Junior, 1909), Engr., B. B. & R. Knight, 314 Dyer St., and 107 Ring St., Providence, R. I.
- WALKER, Frederick Wiley (1898; 1909), V. P. and Ch. Engr., Comstock, Haigh, Walker Co., Wayne Co. Bank Bldg., Detroit, Mich., and *for mail*, Cedarburg, Ozaukee Co., Wis.
- WALKER, Gilbert S. (1904), Asst. Inspc. Engr., Isthmian Canal Com., 24 State St., New York, N. Y.
- WALKER, Perley F. (1908), Prof. Mech. Engrg., Univ. of Kan., and *for mail*, 1301 Ohio St., Lawrence, Kan.
- WALKER, Sidney G. (1907), Engr., Mfrs' Mut. Fire Ins. Co., 815 Banigan Bldg., and 50 Montague St., Providence, R. I.
- WALKER, Thomas C. (1891), Pres., Walker Mfg. Co., 2156 15th St., Denver, Colo.
- WALL, Geo. L. (1897; 1904), V. P., Lima Loco. Corp., and *for mail*, 1103 W. High St., Lima, O.
- WALL, William Guy (1907), V. P. and Ch. Engr., Natl. Motor Vehicle Co., and 2233 Park Ave., Indianapolis, Ind.
- WALLACE, David A. (1892; 1904), Mech. Engr., West. Elec. Co., Hawthorne Sta., Chicago, and *for mail*, 647 N. Oak Park Ave., Oak Park, Ill.
- WALLACE, Erwin Van Doren (Junior, 1911), Teacher Mech. Drawing, Manual Training and Mathematics, Central High Sch., and 4165a Botanical Ave., St. Louis, Mo.

- WALLACE, Jacob H. (Associate, 1908), Mech. Engr., J. P. Karns Tunneling Mch. Co., Mercantile Trust and Bank Co. Bldg., and *for mail*, 1313 Seventh St., Boulder, Colo.
- WALLACE, Joseph H. (1897; 1901), Industrial Engr., Temple Court Bldg., New York, and 7 Webster Terrace, New Rochelle, N. Y.
- WALLACE, Ross S. (1904), V. P. and Genl. Mgr., Peoria Gas & Elec. Co., 316 S. Jefferson Ave., and 216 North St., Peoria, Ill.
- WALLICHS, Adolph O. (1908), Prof. Tech. Hochschule, and *for mail*, Nizza-Allee, 65, Aachen, Germany.
- WALLIS, James T. (1901), Genl. Supt. M. P., Pa. R. R. Lines East of Pittsburgh, Altoona, Pa.
- WALLIS, Philip (1886), Hotel Roanoke, Roanoke, Va.
- WALMSLEY, W. N. (1907), Genl. Mgr., Sao Paulo Tramway, Light & Power Co., Ltd., Sao Paulo, Brazil, S. A.
- WALSH, Thomas J. (Junior, 1906), E. H. Rollins & Sons, 43 Exch. Pl., New York, N. Y., and *for mail*, 97 Howard Ave., Ansonia, Conn.
- WALTON, Albert (Associate, 1911), Shop Systematizer and Expt. Mfg. Accountant, M. Rumely Co., and 1201 Michigan Ave., La Porte, Ind.
- WALWORTH, Arthur C. (1886), Manager, 1894-1897; Pres., Malleable Iron Fittings Co. of Branford, Conn., 100 Pearl St., Boston, and 931 Centre St., Newton Centre, Mass.
- WARD, Charles (1892), Cons. Engr., Charles Ward Engrg. Wks., Charleston, and 1224 Quarrier St., Kanawha Co., W. Va.
- WARD, Charles E. (1900), Pres. and Genl. Mgr., Charles Ward Engrg. Wks., and 213 Morris St., Charleston, W. Va.
- WARDER, Walter J., Jr. (1911), Wks. Mgr., Crocker-Wheeler Co., Ampere, N. J.
- WARG, Robert (1903), Natl. Blower Wks., 17th St. and St. Paul Ave., and 319 Farwell Ave., Milwaukee, Wis.
- WARMAN, William A. (1908), Supt. and Designer, Keller Mech. Engraving Co., 70 Washington St., Brooklyn, N. Y.
- WARNER, Robert L. (1889), Warner, Tucker & Co., 85 Devonshire St., Boston, and Elm St., Concord, Mass.
- WARNER, Worcester R. (1880), Manager, 1890-1893; President, 1897; Pres., Warner & Swasey Co., Cleveland, O., and Singer Bldg., 149 Broadway, New York; also, Wilson Park, Tarrytown, N. Y.
- WARREN, Aldred Kennedy (1912), Mfg. Engr., Genl. Elec. Co., West Lynn, and *for mail*, 1 Burrill St., Swampscott, Mass.
- WARREN, Ambrose Gilmore (1907), Mech. Engr., J. W. Paxson Co., 1607 Mt. Vernon St., Philadelphia, Pa.
- WARREN, George Sessions (1912), Ch. Engr., Sharon Steel Hoop Co., and *for mail*, 2 Euclid Ave., Sharon, Pa.
- WARREN, John E. (1886), Agt., Pulp and Paper Mills, and 159 Cumberland St., Cumberland Mills, Westbrook, Me.
- WARREN, Kenneth L. (1907), Cons. Engr., Fraserville, P. Q., Canada.

- WARREN, Walter B. (Associate, 1901), V. P., Warren Bros. Co., 711 Journal Bldg., and 1133 Thurman St., Portland, Ore.
- WARRINER, Samuel D. (1893), Pres., The Lehigh Coal & Navigation Co., 437 Chestnut St., and 1833 Pine St., Philadelphia, Pa.
- WARRINGTON, James N. (1884; 1885), 2001 La France Ave., South Pasadena, Cal.
- WARRINGTON, Jesse (1887), 271 N. Randolph St., Indianapolis, Ind.
- WASHBURN, William S. (1891), 1363 Main St., Campello Sta., Brockton, Mass.
- WASHINGTON, Dixon E. (1910), Ch. Engr. and Mgr., Packers Architectural & Engrg. Co., 1321 Wright Bldg., and 3219a Natural Bridge Rd., St. Louis, Mo.
- WATERMAN, Fred Walter (1912), Mech. Engr., The Natl. Tube Co., Lorain, and *for mail*, 116 E. Broad St., Elyria, O.
- WATERS, George H. (1901), Pres., Waters-Colver Co., and 345 Bement Ave., West New Brighton, N. Y.
- WATERS, William L. (1909), Designing Engr., Westinghouse Elec. & Mfg. Co., Pittsburgh, Pa.
- WATKINS, Frank Elias (1911), Asst. Mgr., Power & Min. Mchy. Co., Internatl. Gas Eng. Co., Cudahy, and *for mail*, 545 Superior St., Milwaukee, Wis.
- WATSON, Frank (Junior, 1893), Lexington, Mass.
- WATSON, Henry D. (1897; 1900), East. Sales Mgr., Internatl. Motor Co., 1770 Broadway, New York, and 136 E. 19th St., Flatbush, Brooklyn, N. Y.
- WATSON, Herbert L. (Junior, 1907), Sales Engr., Allis-Chalmers Co., 50 Congress St., Boston, Mass.
- WATSON, Wm. (1886), Secy., Am. Academy of Arts and Sciences, 107 Marlborough St., Boston, Mass.
- WATTLES, Joseph Warren, 3d (Junior, 1910), Commer. Engr. Sales Dept., Edison Elec. Ill. Co., 39 Boylston St., Boston, Mass.
- WATTS, George W. (1903; 1904), Wks. Mgr., Canadian Genl. Elec. Co., 212 King St., and *for mail*, 1 Beaumont Rd., Toronto, Ont., Canada.
- WAUGH, Orlo Lovejoy (Junior, 1912), Mech. Engr., Collins Bakery, and *for mail*, 45 W. Mohawk St., Buffalo, N. Y.
- WEAGER, Theodore Alfred (Junior, 1912), Sales Engr., Carrier Air Conditioning Co., 39 Cortlandt St., New York, N. Y.
- WEAR, Burt C. (Junior, 1905), Youngstown Sheet & Tube Co., and *for mail*, 272 Arlington St., Youngstown, O.
- WEBBER, Henry (1886), Mech. Engr., Finch Mfg. Co., Scranton, and *for mail*, 125 Harper St., Dunmore, Pa.
- WEBBER, Sam'l S. (1880), Manager, 1902-1905; Ch. Engr., Trenton Iron Co., and *for mail*, 153 Greenwood Ave., Trenton, N. J.
- WEBBER, William Oliver (1881), Cons. Engr., 7 Wellington Terrace, Brookline, Mass.

- WEBER, Erwin L. F. (Junior, 1910), Engr., Design of Elec., Mech. and Sanitary Equip. of Bldgs., 826 Northern Bank Bldg., and 1212 E. Harrison St., Seattle, Wash.
- WEBER, Geo. A. (Associate, 1896), 71 Courtland Ave., Stamford, Conn.
- WEBER, Herman Frederick (Junior, 1908), Draftsman, Pearson Engrg. Corp., 115 Broadway, and *for mail*, 815 E. 169th St., New York, N. Y.
- WEBER, O. L. E. (1895; 1905), Mgr., Mich. Sulphite Fibre Co., Port Huron, Mich.
- WEBSTER, Hosea (1883), Dist. Sales Mgr., Babcock & Wilcox Co., 85 Liberty St., New York, N. Y., and *for mail*, 174 S. Mountain Ave., Montclair, N. J.
- WEBSTER, Lawrence Burns (Junior, 1910), Efficiency Engr., Am. Gas & Elec. Co., 30 Church St., New York, N. Y., and *for mail*, 926 S. Washington St., Marion, Ind.
- WEBSTER, Warren (Associate, 1903), Pres., Warren Webster & Co., Point and Pearl Sts., and 626 Cooper St., Camden, N. J.
- WEBSTER, William R. (1889), Cons. and Inspc. Engr., 411 Walnut St., Philadelphia, Pa.
- WEBSTER, William Ralph (1911), Designer in Charge Checking Dept., Cambria Steel Co., Johnstown, and *for mail*, Edgehill Drive and Erie St., Westmont, Johnstown, Pa.
- WEBSTER, William Reuben (1893; 1907), Genl. Supt., Bridgeport Brass Co., and *for mail*, 208 Brooklawn Ave., Bridgeport, Conn.
- WEEKS, Charles H. (1892), V. P., Buckeye Eng. Co., and 138 Franklin Ave., Salem, O.
- WEEKS, Paul (1905; 1911), Mech. Engr., 216 Central Bldg., 6th and Main Sts., Los Angeles, Cal.
- WEGG, David S., Jr. (Junior, 1909), Engr., The Beaver River Power Co., Boise, Idaho, and 16 E. Ontario St., Chicago, Ill.
- WEHNER, Lewis (1901; 1907), Engr., Pawling & Harnischfeger Co., 38th St. and National Ave., and *for mail*, 514 Cudahy Apts., Juneau Pl. and Mason St., Milwaukee, Wis.
- WEICHERT, Arnold E. (1907), J. G. White & Co., 43 Exch. Pl., New York, N. Y., and *for mail*, 54 Cleveland Terrace, Bloomfield, N. J.
- WEICK, Charles William (1901), Asst. Prof. in Industrial Arts, Teachers College, Columbia Univ., and 507 W. 124th St., New York, N. Y.
- WEICKEL, Henry (1889), Ch. Engr., Pawling & Harnischfeger Co., 38th and National Ave., and *for mail*, 369½ 16th Ave., Milwaukee, Wis.
- WEIDNER, Paul G. (1912), Ludlow Mfg. Associates, and *for mail*, P. O. Box 74, Ludlow, Mass.
- WEIMER, Hugo W. (Junior, 1910), Engr. Min. and Smelting Sales Dept., Power & Min. Mchy. Co., Cudahy, and *for mail*, 559 Wentworth Ave., Milwaukee, Wis.
- WEINBERG, Semen G. (1901; 1907), Min. Engr., Mgr., Worthington Pump Co., Ltd., and *for mail*, P. O. Box 65, St. Petersburg, Russia.

- WEINSHANK, Theodore (1906), Mgr., Warren Webster & Co., 821 Hume Mansur Bldg., and 2341 N. Delaware St., Indianapolis, Ind.
- WEINTZ, Louis John (Junior, 1912), Mech. Engr., Am. Mfg. Co., and *for mail*, 1079 Lincoln Pl., Brooklyn, N. Y.
- WEISS, Carl William (1912), Mietz & Weiss, New York, and *for mail*, 933 E. 12th St., Brooklyn, N. Y.
- WEISSBLATT, Murray E. (Junior, 1907), Crocker-Wheeler Co., 30 Church St., and 400 Manhattan Ave., New York, N. Y.
- WELLINGTON, J. W. (1912), V. P., U. S. Motor Co., 3 W. 61st St., and 440 Riverside Drive, New York, N. Y.
- WELLMAN, Samuel T. (1881), Manager, 1885-1888; Vice-President, 1896-1898; President, 1901; Life Member; Chairman, Wellman-Seaver-Morgan Co., and *for mail*, 8803 Euclid Ave., Cleveland, O.
- WELLS, Albert Edward (1912), Prof. Mch. Constr. and Supt. of Shops, Sibley College, Cornell Univ., Ithaca, N. Y.
- WELLS, Edward C. (1904), Supt. and Ch. Engr., Hardie-Tynes Mfg. Co., and *for mail*, 1618 14th Ave., S., Birmingham, Ala.
- WELLS, Frank O. (1903), Pres. and Treas., Wells Bros. Co., and *for mail*, 8 Grinnell St., Greenfield, Mass.
- WELLS, Frederick Latimer (1892), 101 S. Clinton St., Chicago, Ill.
- WELLS, G. A. (1905), Ch. Engr., Adams Express Co., 53 Broadway, New York, N. Y.
- WELLS, J. Barnard (Junior, 1909), 44 Oakvale Ave., Berkeley, Cal.
- WELLS, James Hollis (1904), Member of Firm, Clinton & Russell, 32 Nassau St., New York, N. Y.
- WELLS, J. Leland (1885), Pres., Wells & Newton Co., 292 Ave. B, New York, and *for mail*, Amityville, L. I., N. Y.
- WELLS, Robert G. (1909), Genl. Mgr., The Tata Iron & Steel Co., Ltd., Sakchi, via Kalimati, B. N. Ry., India, and care of Mrs. David Underhill, East Aurora, N. Y.
- WENDELL, Henning Gabriel (1912), Ch. Engr., Asbestos Protected Metal Co., and *for mail*, P. O. Box 415, Beaver Falls, Pa.
- WENDT, Henry William (1912), Secy. and Treas., Buffalo Forge Co., 490 Broadway, and 633 Lafayette Ave., Buffalo, N. Y.
- WENTWORTH, Reginald Andrew (Junior, 1911), Engr. with H. L. Gantt, and *for mail*, The Ivan, 47th St. and Baltimore Ave., Philadelphia, Pa.
- WERST, Charles Wm. (1909), Supt., Lima Loco. & Mch. Co., and *for mail*, 1534 Lakewood Ave., Lima, O.
- WESCOTT, William Patton (1910), Managing Dir., Galena-Signal Oil Co., Ltd., Broadway Court, Broadway, Westminster, London, S. W., England.
- WESSINGER, Henry J. (1897), Pres., Imperial Iron Wks., and *for mail*, 1111 London Rd., Duluth, Minn.
- WESSON, Paul Bancroft (1912), Mfg. Foreman and M. M., Lowell Mch. Shop, Lowell, Mass.

- WEST, Arthur (1902), Mgr. Power Dept., Bethlehem Steel Co., South Bethlehem, and 114 S. High St., Bethlehem, Pa.
- WEST, Thos. D. (1884), Iron Fdy. Expt. and Chairman, The West Steel Casting Co., E. 70th St., and *for mail*, 10,511 Pasadena Ave., N. E., Cleveland, O.
- WEST, Walter Carr (Junior, 1912), Mech. Expt., Galena-Signal Oil Co., 410 Traction Bldg., Indianapolis, Ind.
- WESTCOTT, Valorus Stukely (1910), Mech. Supt., J. & P. Coats, Ltd., and *for mail*, 644 Main St., Pawtucket, R. I.
- WESTERFIELD, George Sumner (Junior, 1903), Mgr. and Dist. Mgr., Hooven, Owens, Rentschler Co., Warren Webster Co., 326-329 Hennen Bldg., New Orleans, La., and *for mail*, 323 Chronicle Bldg.; also, 421 Hawthorne St., Houston, Tex.
- WESTINGHOUSE, George (Honorary, 1897), President, 1910; Pittsburgh, Pa.
- WESTINGHOUSE, H. Herman (1884), Manager, 1889-1892; Vice-President, 1904-1906; Life Member; V. P., Westinghouse Air Brake Co., 165 Broadway, New York, N. Y.
- WESTLAKE, Charles Thomas (1910), Ch. Mech. Engr., Commonwealth Steel Co., 1629 Pierce Bldg., St. Louis, Mo.
- WESTON, Edward (1882), Pres., Weston Elec. Instrument Co., Waverly Park, Newark, and North Ave., Elizabeth, N. J.
- WESTON, Frederick Willoughby (Associate, 1907), Rep., Baldwin Loco. Wks., Stand. Steel Wks. Co., 50 Church St., and 26 W. 48th St., New York, N. Y.
- WETMORE, Charles P. (1901), Genl. Supt., Dial Cash Register Co., 409-415 Third St., and *for mail*, 518 Astor St., Milwaukee, Wis.
- WEYMOUTH, C. R. (1904; 1907), Ch. Engr., Chas. C. Moore & Co. Engrs., 99 First St., San Francisco, and 2733 Ashby Ave., Berkeley, Cal.
- WEYMOUTH, Thomas Rote (1910), Ch. Engr., United Natural Gas Co., 206 Seneca St., and 304 Central Ave., Oil City, Pa.
- WHEELER, Charles Van Cise (1906), Supt., Washington Steel & Ordnance Co., P. O. Box 812, and *for mail*, 1609 16th St., N. W., Washington, D. C.
- WHEELER, Clifton Harold (1901), V. P. and Genl. Mgr., C. H. Wheeler Mfg. Co., Lehigh Ave. and 18th St., and 521 Lincoln Drive, Philadelphia, Pa.
- WHEELER, Earl (Junior, 1907), Genl. Mgr., Elec. Speedometer Co., Evans Bldg., and *for mail*, R. F. D. 4, Lorcom Lane, Washington, D. C.
- WHEELER, Frank R. (1909), Member of Firm, Guernsey & Wheeler, 436 Rialto Bldg., San Francisco, and 700 Central Bldg., Los Angeles, Cal.
- WHEELER, Schuyler Skaats (1899), Pres., Crocker-Wheeler Co., Ampere, and res., Bernardsville, N. J.
- WHEELER, Seth (1894), Pres., A. P. W. Paper Co., Albany, and Castleton, N. Y.
- WHEELER, Seth, Jr. (Junior, 1905), V. P. and Genl. Supt., A. P. W. Paper Co., and 246 Lark St., Albany, N. Y.

- WHEELER, Wm. Trimble (1905), 286 Greenwich St., and 340 W. 21st St., New York, N. Y.
- WHINERY, Samuel (1895), Cons. Civ. Engr., 95 Liberty St., New York, N. Y., and *for mail*, 203 Glenwood Ave., East Orange, N. J.
- WHIPPLE, C. Earl (1912), Ch. Draftsman Mech. Div., Isthmian Canal Com., Gorgona, Canal Zone, Panama.
- WHIPPLE, William (Junior, 1905), Supt., Cinclare Central Factory, Cinclare, La.
- WHITAKER, Henry E. (1891; 1904), Mech. Engr., Parke, Davis & Co., and *for mail*, 146 W. Hancock Ave., Detroit, Mich.
- WHITCOMB, LeRoy A. (Junior, 1909), Checker, N. Y. Edison Co., 55 Duane St., New York, and *for mail*, 205 St. James Pl., care of Henry Macdonald, Brooklyn, N. Y.
- WHITE, Arthur M. (1903), Supt., Am. Loco. Co., and 228 Ash St., Manchester, N. H.
- WHITE, Edward F. (1891), Cons. Engr., Sulphur Plants, and Sand Lime Brick Plants, Pres., Rutland Mfg. Co., Rutland, Vt.
- WHITE, George Henry (1906), Supt., Oil City Boiler Wks., and *for mail*, 4 Lincoln St., Oil City, Pa.
- WHITE, Herbert J. (1909), Production Engr., Link-Belt Co., Indianapolis, Ind.
- WHITE, James A. (Junior, 1900), Wks. Mgr., Worcester Pressed Steel Co., and *for mail*, 12 Clearview Ave., Worcester, Mass.
- WHITE, John Culbertson (1906; 1911), Cons. Steam and Ch. Operating Engr., Capitol Power Plant, and *for mail*, 622 E. Main St., Madison, Wis.
- WHITE, Joseph J. (1880), Pres., Joseph J. White, Inc., New Lisbon, N. J.
- WHITE, Merton G. (Junior, 1906), N. Y. Rep., Fitchburg Steam Eng. Co., and Harrisburg Star Boiler Co., 1 Madison Ave., New York, N. Y.
- WHITE, Sir William H., K. C. B. (Honorary, 1900), Naval Arch., 8 Victoria St., Westminster, and Cedarcroft, Putney Heath, London, S. W., England.
- WHITE, Wm. M. (1907), Mgr. and Ch. Engr. Hyd. Dept., Allis-Chalmers Co., and *for mail*, A 375 Lake Drive, Milwaukee, Wis.
- WHITEFORD, James F. (1908), Bonus Supvr., Santa Fé R. R. Shops, Santa Fé Motive Power Bldg., and 816 West St., Topeka, Kan.
- WHITEHEAD, George E. (1887), Mech. Engr., 621 Broadway, Providence, R. I.
- WHITEHURST, Herbert C. (Junior, 1908), Mgr., Evans, Almirall & Co., 10th and Byrd Sts., Richmond, Va.
- WHITESIDE, Walter Hunter (1910), Stevens-Duryea Co., Chicopee Falls, Mass.
- WHITHAM, Jay M. (1883), Cons. Engr., 607 Bullitt Bldg., Philadelphia, Pa.

- WHITING, Charles W. (1885; 1895), Cons. Engr., 33 Broad St., Boston, and 62 Kirtland St., Cambridge, Mass.
- WHITING, Richard A. (Junior, 1909), Instr. Dept. of Applied Mech., Pratt Inst., Brooklyn, N. Y., and *for mail*, Oradell, Bergen Co., N. J.
- WHITING, S. B. (1880), Life Member; Manager, 1880-1882; Vice-President, 1882-1883; 11 Ware St., Cambridge, Mass.
- WHITLOCK, Elliott H. (1901), Factory Mgr., Natl. Carbon Co., and *for mail*, 11,118 Lake Ave., Cleveland, O.
- WHITNEY, Baxter D. (1886), Partner, Firm Baxter D. Whitney & Son, Winchendon, Mass.
- WHITNEY, Clarence Edgar (1911), Pres. and Genl. Mgr., The Whitney Mfg. Co., Hartford, Conn.
- WHITNEY, Wm. M. (Associate, 1886), Winchendon, Mass.
- WHITNEY, William S. (1911), Supervising Engr., Am. Woolen Co., Boston, and 177 E. Haverhill St., Lawrence, Mass.
- WHITON, Lucius E. (1905), Mgr. and Mech. Engr., D. E. Whiton Mech. Co., 190 Howard St., and *for mail*, 71 William St., New London, Conn.
- WHITTED, Thomas B. (1900; 1903; 1909), Mech. Engr., Realty Bldg., and 317 W. 5th St., Charlotte, N. C.
- WHITTEMORE, D. J. (1889), Cons. Engr., C. M. & St. P. Ry. Co., 222 Biddle St., Milwaukee, Wis.
- WHITTEMORE, Herbert L. (1903; 1910), Fayerweather Hall, Columbia Univ., New York, N. Y.
- WHITTEMORE, John R. (1902), Santa Barbara, Cal.
- WHITTIER, Chas. Robert (1909), Canutillo, Tex.
- WHITTLESEY, James T. (1907), Engr., Claus Spreckels Bldg., San Francisco, and Berkeley, Cal.
- WHYTE, Frederic M. (1902), Vice-President, 1908-1910; V. P., Hutchins Car Roofing Co., New York, and *for mail*, 14 Benedict Ave., Tarrytown, N. Y.
- WHYTE, John S. (1902), Mech. Engr., Dominion Coal Co., Ltd., Glace Bay, N. S., Canada.
- WICK, Henry (Associate, 1903), 710 Dollar Savings & Trust Co. Bldg., and 416 Wick Ave., Youngstown, O.
- WICKERSHAM, Nathan R. (1907), Supt., Ingersoll-Rand Co., Painted Post, and Corning, N. Y.
- WIDDICOMBE, R. A. (1898; 1906), Engr., 5552 Lakewood Ave., Chicago, Ill.
- WIELAND, Charles F. (1901), Cons. Engr., 914 Mut. Savings Bank Bldg., San Francisco, and Monte Rosa Terrace, Garber St., Berkeley, Cal.
- WIGGIN, Ralph Mitchell (1910), Apartado 97-B, Mexico City, Mex.
- WIGHTMAN, D. A. (1884), Cons. Engr., Warren, R. I.
- WILBUR, Ralph Sydney (Junior, 1912), Instr. Mech. Engrg., College of Applied Science, Univ. of Ia., Iowa City, Ia.

- WILCOX, C. C. (Junior, 1905), Asst. to Cons. Elec. Engr., Hodenpyl Hardy & Co., Dime Savings Bank Bldg., and 463 Hamilton Ave., Detroit, Mich.
- WILCOX, Perley Smith (Junior, 1899), Asst. Mgr., Kodak Park Wks., Eastman Kodak Co., and *for mail*, 84 Beverly St., Rochester, N. Y.
- WILCOX, Wallace J. (1891; 1893), Supt. M. P., Las Vegas & Tonapah R. R., Las Vegas, Nev., and 817 W. 28th St., Los Angeles, Cal.
- WILDER, Clifton W. (1907), Elec. Engr., Pub. Service Com., 154 Nassau St., New York, N. Y.
- WILDER, Stuart (Associate, 1904), V. P. and Genl. Mgr., No. Westchester Ltg. Co., and Peekskill Ltg. & R. R. Co., and Engr. Elec. Dept., Westchester Ltg. Co., Mt. Vernon, N. Y.
- WILDER, Sylvanus Wells (Junior, 1907), Supt. Dolphin Jute Mills, and *for mail*, 64 17th Ave., Paterson, N. J.
- WILDIN, George W. (1901), Mech. Supt., N. Y., N. H. & H. R. R., New Haven, Conn.
- WILE, Julius I. (1904; 1908), Chalmers & Williams, Chicago Heights, Ill.
- WILEY, Edgar C. (1903), Cons. Engr., 914 Main St., and cor. Elmwood and Rivermont Aves., Lynchburg, Va.
- WILEY, James M. (Junior, 1909), Ampere, N. J.
- WILEY, Wm. H. (1880), Treasurer, 1884-1913; 43-45 E. 19th St., New York, N. Y., and 73 Halstead St., East Orange, N. J.
- WILHELM, Edward A. (1912), Ch. Draftsman, Am. Hoist & Derrick Co., and *for mail*, 1049 Van Slyke Ave., St. Paul, Minn.
- WILKE, William (1893), Mech. and Chem. Engr., 86 Norwood Ave., Buffalo, N. Y.
- WILKIE, Donald Cook (1911), Cons. Engr., Straits & F. M. S. Genl. Agency Co., Seremban, Federated Malay States, and care of Mrs. Himsworth, Rosedale Cottage, Westfield Rd., West Ferry, Dundee, Scotland.
- WILKIN, John T. (1898), V. P. and Mech. Engr., Connersville Blower Co., and *for mail*, 905 Grand Ave., Connersville, Ind.
- WILKINSON, Cecil Tom (Junior, 1908), 8 Culmington Rd., Ealing, London, W., England.
- WILKINSON, John (1907), Ch. Engr., H. H. Franklin Mfg. Co., and *for mail*, 211 Robinson St., Syracuse, N. Y.
- WILKINSON, Thomas L. (1894; 1905), Cons. Mech. Engr., 407 Boston Bldg., and 5833 Montview Blvd., Denver, Colo.
- WILLARD, Lewis Leigh (1907; 1910), Asst. Genl. Mgr., W. J. Rainey Coke Co., Uniontown, Pa.
- WILLCOX, George Bingham (1895; 1908), Pres. and Genl. Mgr., Willcox Engrg. Co., Willcox Engrg. Co. Bldg., and *for mail*, 900 S. Warren Ave., Saginaw, Mich.
- WILLE, Henry Valentin (1900), Asst. to Genl. Supt., Baldwin Loco. Wks., 500 N. Broad St., and 743 Corinthian Ave., Philadelphia, Pa.

- WILLHOFFT, F. O. (Associate, 1905), Prof. Mech. Engrg., Queens Univ., and *for mail*, 93 Wellington St., Kingston, Ont., Canada.
- WILLIAMS, Alan Gillespie (Junior, 1909), Eng. House Foreman, Vandalia R. R., and *for mail*, 717 Sycamore St., Terre Haute, Ind.
- WILLIAMS, Alpheus Fuller (Associate, 1900), Genl. Mgr., De Beers Consltd. Mines, Ltd., and 1 Park Rd., Kimberly, Cape Colony, S. A.
- WILLIAMS, Charles Henry (1901; 1904), 1346 St. Paul St., Denver, Colo.
- WILLIAMS, D. Curtis (1891), Mech. Engr., 664 Maryland Ave., Pittsburgh, Pa.
- WILLIAMS, Edwin Hawkins (1912), Managing Owner, Genl. Engrg. Wks., Somerset St., Graaff Reinet, S. A.
- WILLIAMS, Ernest D. (Junior, 1905), Turbine Eng. Dept., Genl. Elec. Co., and *for mail*, 117 Park Ave., Schenectady, N. Y.
- WILLIAMS, Fay Bailey (Junior, 1912), Estimator, Osgood Bradley Car Co., Worcester, Mass.
- WILLIAMS, Franklin (Associate, 1896), Engrg. Specialties, 39 Cortlandt St., New York, N. Y.
- WILLIAMS, George W. (1904; 1907), Mgr., Chapman Eng. & Mfg. Co., Dundas, Ont., Canada.
- WILLIAMS, Haryey D. (1912), Cons. Engr., The Waterbury Tool Co., and *for mail*, 889 St. Nicholas Ave., New York, N. Y.
- WILLIAMS, Howard E. (1895; 1904), Ch. Draftsman, Calumet & Hecla Min. Co., and *for mail*, 1144 Calumet Ave., Calumet, Mich.
- WILLIAMS, Llewellyn (1907), Suptg. Engr., United Fruit Co., 131 State St., Boston, and 27 Rockland Ave., Malden, Mass.
- WILLIAMS, Louis William (Associate, 1912), Dist. Sales Mgr., Union Drawn Steel Co., 460 Washington St., New York, and *for mail*, 1356 Pacific St., Brooklyn, N. Y.
- WILLIAMS, Richard Grant (Junior, 1912), Charge of Mech. Testing Lab., Norton Co., and *for mail*, 38 Orne St., Worcester, Mass.
- WILLIAMS, Walter Gordon (1911), Constr. Engr., The M. W. Kellogg Co., 50 Church St., New York, N. Y., and 60 Manning Ave., Plainfield, N. J.
- WILLIAMS, Wilbur S. (Junior, 1912), Mech. Engr., The Wabash Screen Door Co., 2222 Elm St., S. E., Minneapolis, Minn.
- WILLIAMSON, Alfred (1902; 1912), Mech. Engr., Dept. Water Supply, Gas. and Elec., 13 Park Row, New York, and *for mail*, Pondfield Rd., Bronxville, N. Y.
- WILLIAMSON, George E. (Junior, 1906), Ch. Engr., Strathmore Paper Co., Mittineague, and *for mail*, 141 Pineywoods Ave., Springfield, Mass.
- WILLIAMSON, Leroy A. (Associate, 1902), Pres., L. A. Williamson Co., 261 Broadway, New York, N. Y.
- WILLIAMSON, Wm. C. (1882), Valley Rd. and 12th St., Oak Lane, Philadelphia, Pa.

- WILLIS, Edward J. (1895; 1896), Richmond Elec. Co., P. O. Box 416, Richmond, Va.
- WILLISTON, Arthur L. (1896; 1899), Prin., Wentworth Inst., Boston, and *for mail*, 27 Kilsyth Rd., Brookline, Mass.
- WILLISTON, Belvin Thomas (1905), Wks. Mgr., United Injector Co., 23 Watson St., Boston, and 3 Monmouth St., Somerville, Mass.
- WILLS, C. Harold (1909), Ch. Engr. and Factory Mgr., Ford Motor Co., and *for mail*, Box 44, North End Sta., Detroit, Mich.
- WILLSON, Ernest M. (Associate, 1909), Ch. Draftsman, Hart-Parr Co., and *for mail*, 610 Illinois St., Charles City, Ia.
- WILLSON, Frederick Newton (1883), Prof. Descriptive Geometry and Tech. Drawing, Princeton Univ., and *for mail*, Box 63, Princeton, N. J.
- WILMERDING, Chas. Henry (1904), 20 Sanford Ave., Flushing, N. Y.
- WILMORE, John J. (1893), Dean Sch. of Engrg., Ala. Poly. Inst., Auburn, Ala.
- WILSON, Archibald H. (Associate, 1908), Ch. Draftsman, Stone & Webster Engrg. Corp., Keokuk, Ia., and 21 Butler St., Lawrence, Mass.
- WILSON, Birton N. (1904), Prof. Mech. Engrg., Univ. of Ark., and *for mail*, 241 College Ave., Fayetteville, Ark.
- WILSON, Charles E. (1912), Chicago Sales Mgr., Internatl. Steam Pump Co., and *for mail*, 7347 Harvard Ave., Chicago, Ill.
- WILSON, Chester Worcester (Junior, 1911), Lowell Mch. Shop, and *for mail*, 19 Morse St., Newton, Mass.
- WILSON, Clarence C. (Junior, 1900), Mgr., Wilson Mchy. Co., 361 Market St., San Francisco, and 2214 Prince St., Berkeley, Cal.
- WILSON, Geo. Samuel (Junior, 1907), Asst. Prof. Mech. Engrg., Wash. Univ., Seattle, Wash.
- WILSON, Henry D. (1903; 1912), V. P., Wilson-Snyder Mfg. Co., 2 Ross St., and 204 Darrah St., Pittsburgh, Pa.
- WILSON, Henry M. (1911), Dist. Agt., Pittsburgh Valve, Fdy. & Constr. Co., 978 Rockefeller Bldg., and 6801 Euclid Ave., Cleveland, O.
- WILSON, Hugh H. (1907), Supt., Ontario Power Co. of Niagara Falls, and P. O. Box 4, Niagara Falls, N. Y.
- WILSON, Jacob D. (Junior, 1903), Pres., Genl. Mgr. and Mech. Engr., Am. Elev. Co., 113-115 Cedar St., New York, N. Y., and *for mail*, 215 Essex Ave., Boonton, N. J.
- WILSON, James Edward (1887), M. M., Natl. Lock Washer Co., Newark, N. J., and 205 W. 122d St., New York, N. Y.
- WILSON, James Wright (Associate, 1907), Factory Mgr., Bramhall Deane Co., 264 Water St., New York, and 30 S. Portland Ave., Brooklyn, N. Y.
- WILSON, Lester G. (1903; Associate, 1907), Secy. and Engr., Jas. G. Wilson Mfg. Co., New York, N. Y., and *for mail*, 502 Mowbray Arch, Norfolk, Va.

- WILSON, Nelson C. (1906), 209 Ninth St., Pittsburgh, Pa.
- WILSON, Percy Hartshorne (1912), Secy., Asso. of Am. Portland Cement Mfrs., 1526 Land Title Bldg., Philadelphia, Pa.
- WILSON, Robert Alexander (Junior, 1910), Ohio Wks., Carnegie Steel Co., Youngstown, O.
- WILSON, William L. (Junior, 1907), V. P., The Elec. Installation Co., 411 N. Charles St., Baltimore, Md.
- WILSON, Wm. R. (Junior, 1899), Alberger Pump & Condenser Co., 140 Cedar St., New York, and *for mail*, 224 Palisade Ave., Yonkers, N. Y.
- WINGER, Stanley D. (Junior, 1904), Sales Engr., Green Engrg. Co., 28 E. Jackson St., and 4447 Indiana Ave., Chicago, Ill.
- WINGO, Richard T. (1910), Pres., Superior Mch. & Engrg. Co., 51-53 Fort St., E., and *for mail*, 93 Bethune Ave., E., Detroit, Mich.
- WINSHIP, James G. (1891), Internatl. Steam Pump Co., 115 Broadway, New York, and *for mail*, 209 Ocean Ave., Brooklyn, N. Y.
- WINSHIP, W. E. (1908), Engr., Gould Storage Battery Co., 345 Fifth Ave., and *for mail*, 549 Riverside Drive, New York, N. Y.
- WINSOR, Paul (1910), Ch. Engr., M. P. and R. S., Boston Elevated Ry. Co., 101 Milk St., Boston, and Weston, Mass.
- WINTERROWD, William H. (Junior, 1907), Mech. Engr., Canadian Pacific Ry., and *for mail*, 817 St. Joseph Blvd., Montreal, Que., Canada.
- WINTHER, Chas. A. G. (1897; 1900), Pres. and Mgr., Chas. A. G. Winther Co., Inc., 91 High St., Boston, and 122 Highland Rd., West Somerville, Mass.
- WINTZER, Rudolph (1908), 685 Farwell Ave., Milwaukee, Wis.
- WISEWELL, Francis H., Jr. (Junior, 1905), Baldwin Loco. Wks., Philadelphia, Pa.
- WISNER, George M. (1907), Ch. Engr., Sanitary Dist. of Chicago, 1500 Am. Trust Bldg., Chicago, Ill.
- WITHINGTON, Sidney (Junior, 1908), Electrification Dept., N. Y., Westchester & Boston Ry., Mt. Vernon, N. Y., and 35 Bay State Rd., Boston, Mass.
- WOLCOTT, Henry A. (1897), Mech. and Civ. Engr., West Hartford, Conn.
- WOLDENBERG, I. (Junior, 1903), Mgr., Ingersoll-Rand Co., m. b. H., Oststrasse 128-132, and Sternstrasse 20a, Düsseldorf, Germany.
- WOLF, Otto C. (1889), Engr., 511-512 Denckla Bldg., and 1706 Master St., Philadelphia, Pa.
- WOLFE, Elvin A. (1912), Supt., Penn-Allen Cement Co., Nazareth, Pa.
- WOLFF, Herbert Wm. (Junior, 1904), Asst. to V. P., Am. Car & Fdy. Co., 1510 Syndicate Trust Bldg., and 5470 Delmar Blvd., St. Louis, Mo.
- WOOD, Albert Carroll (1894; 1900; 1904), Cons. Mech. Engr., Pa. Bldg., 15th and Chestnut Sts., and N. W. cor. 52d St. and Susquehanna Ave., Philadelphia, Pa.

- WOOD, Arthur J. (1898; 1907), Assoc. Prof. Railroad Mech. Engrg., Pa. State College, State College, Pa.
- WOOD, Augustus (1901), Ch. Draftsman, Niles Tool Wks. Co., and 306 S. D. St., Hamilton, O.
- WOOD, Benjamin F. (1897; 1907), Asst. Engr. M. P. Dept., Pa. R. R. Co., and 1200 Second St., Juniata Sta., Altoona, Pa.
- WOOD, Edward R., Jr. (Junior, 1900), Life Junior; Sales Mgr., R. D. Wood Co., 400 Chestnut St., and *for mail*, 245 S. 17th St., Philadelphia, Pa.
- WOOD, Erwin E. (1900), Life Member; Salesman, Jones & Lamson Mch. Co., Lock Box 421, Detroit, Mich.
- WOOD, Frank J. (1899), Ch. Engr., Marx & Rawolle's Glycerine Factory, 9 Van Brunt St., and *for mail*, 361 Henry St., Brooklyn, N. Y.
- WOOD, Geo. R. (1906), Elec. and Mech. Engr., Berwind-White Coal Min. Co., 1120 Arcade Bldg., and Racquet Club, Philadelphia, Pa.
- WOOD, Henry Shotwell (1907), Cons. Engr., 1825 Park Row Bldg., New York, N. Y., and *for mail*, 1 Hamilton Rd., Glen Ridge, N. J.
- WOOD, Kenneth F. (Associate, 1899), Supt., Sayles' Bleacheries, Saylesville, and 23 Maynard St., Pawtucket, R. I.
- WOOD, Thomas C. (Junior, 1909), U. S. Inspr., Isthmian Canal Com., 24 State St., New York, and *for mail*, 359 St. John's Pl., Brooklyn, N. Y.
- WOOD, Walter (1880; 1890), R. D. Wood & Co., 400 Chestnut St., and 1620 Locust St., Philadelphia, Pa.
- WOOD, William H. (1889), Engr., and Bldr. Spec. Mchy., 10 South Ave., and 43 Washington St., Media, Pa.
- WOODARD, Louis A. (1900; 1904), V. P. and Genl. Mgr., The William Tod Co., Youngstown, and Boardman, O.
- WOODBURY, C. J. H. (1880), Life Member; Cons. Engr., 45 Milk St., Boston, and *for mail*, 51 Baltimore St., Lynn, Mass.
- WOODMAN, Forrest E. (Junior, 1910), Asst. Engr., U. S. Bureau of Mines, 40th and Butler Sts., and *for mail*, 250 Jarbola St., Pittsburgh, Pa.
- WOODMAN, George A. (1911), Mech. Engr., Kirby Equip. Co., Peoples Gas Bldg., and *for mail*, 6752 Perry Ave., Chicago, Ill.
- WOODMANSEE, Fay (1911), Cons. Engr., Woodmansee, Davidson & Sessions, 1048 First Natl. Bank Bldg., Chicago, and 430 18th Ave., Maywood, Ill.
- WOODS, Frank F. (Associate, 1904), Pres. and Treas., S. A. Woods Mch. Co., Boston, Mass.
- WOODS, Mercer Hugh (Junior, 1912), Tool Draftsman, Automatic Elec. Co., Chicago, Ill., and care of J. R. Woods, Aylmer, Ont., Canada.
- WOODWARD, Sherman Melville (1907), Prof. Mech., State Univ. of Ia., Iowa City, Ia.
- WOODWELL, Julian E. (1900; 1908), Cons. Engr., Terminal Bldg., Park Ave. and 41st St., New York, and 353 Egmont Ave., Mt. Vernon, N. Y.

- WOODY, Guy Vimont (Junior, 1911), Mech. Engr., Allis-Chalmers Co., Milwaukee, and *for mail*, 586 68th Ave., West Allis, Wis.
- WOOLLEY, Harold Oakley (Junior, 1909), Mech. Engr., Power Spec. Co., and 101 Main St., Dansville, N. Y.
- WOOLSON, Harry Thurber (1907), Ch. Draftsman Engrg. Dept., Gas Eng. & Power Co. and Chas. L. Seabury & Co., Consld., New York, and *for mail*, Lawton St., Lincoln Park, Yonkers, N. Y.
- WOOLSON, Ira H. (1896), Cons. Engr., Natl. Bd. of Fire Underwriters, 35 William St., New York, N. Y.
- WOOLSON, Orosco C. (1886), Constr. Engr. and Contr., 39 Cortlandt St., New York, N. Y., and Newark, N. J.
- WOOLSON, Wm. D. (Associate, 1897), Treas., Jones & Lamson Mch. Co., Springfield, Vt.
- WORCESTER, H. E. (Associate, 1903), Supt., Revere Sugar Refinery, East Cambridge, and *for mail*, 10 Kirkland Rd., Cambridge, Mass.
- WORDEN, Euclid P. (1899; 1902), Ch. Engr., Fred M. Prescott Steam Pump Co., and 571 Summit Ave., Milwaukee, Wis.
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- WORTHINGTON, Charles C. (1882), Manager, 1883-1886; Man-walamink, Shawnee-on-Delaware, Pa.
- WRAITH, William (1903), Internatl. Smelting & Refining Co., Kearns Bldg., Salt Lake City, Utah.
- WRIGHT, Calvin Shelor (Junior, 1907), Calhoun, Ga.
- WRIGHT, Ernest N. (1890), Cons. Engr., 691 Huntington Terrace, Pasadena, Cal.
- WRIGHT, James Knox (1894), Cons. Engr. and Mfr., Wright's Pat. Safety Stop, 136 Liberty St., New York, and 31 Kraft Ave., Bronxville, N. Y.
- WRIGHT, Reginald A. (1907), Ch. Draftsman Hyd. Dept., Wellman, Seaver, Morgan Co., Cleveland, and *for mail*, 3024 Euclid Blvd., Cleveland Heights, O.
- WRIGHT, Ross Pier (1911), Secy. and Treas., Reed Mfg. Co., and *for mail*, 235 W. 6th St., Erie, Pa.
- WRIGHT, Roydon V. (1907), Mech. Dept. Editor, Railway Age Gazette, 83 Fulton St., New York, N. Y., and *for mail*, 192 N. Walnut St., East Orange, N. J.
- WRIGHT, Wm. Quinby (1908), Min. and Civ. Engr., 727 Merchants Exch. Bldg., San Francisco, and Sausalito, Cal.
- WURTS, Edward Vanuxem (Associate, 1897), Mech. Engr., United Engrg. & Fdy. Co., and *for mail*, 622 Kirtland St., Pittsburgh, Pa.
- WYATT, Edgar William (1910), The M. Werk Co., Poplar St., Cincinnati, O.
- WYCKOFF, Arcalous W. (Junior, 1897), Pres., A. W. Wyckoff Co., 2218 Farmers Bank Bldg., and 328 Morewood Ave., Pittsburgh, Pa.
- WYER, Samuel S. (1904; 1911), Cons. Mech. Engr., Harrison Bldg., Columbus, O.

- WYLIE, Howard M. (Junior, 1912), Healy Box Corp., and *for mail*, 10 W. 96th St., New York, N. Y.
- WYMAN, Arthur H. (Junior, 1909), Sales and Estimating Engr., Allis-Chalmers Co., and 560 32d St., Milwaukee, Wis.
- WYMAN, Horace (1892), Cons. Engr., 20 Harvard St., Worcester, Mass.
- WYNKOOP, Hubert S. (1908), Elec. Engr., Dept. Water Supply, Gas and Elec., 13-21 Park Row, New York, and *for mail*, 1574 50th St., Brooklyn, N. Y.
- YARNALL, D. Robert (1903; 1911), Mech. Engr., Yarnall-Waring Co., and Genl. Mgr. and V. P., Nelson Valve Co., Chestnut Hill, Philadelphia, Pa.
- YARYAN, Homer T. (1892), V. P., The Yaryan Naval Stores Co., Toledo, O.
- YATES, R. L. (Junior, 1907), Mgr. and Ch. Engr. Waterwheel Dept., The Platt Iron Wks. Co., and *for mail*, 108 Oxford Ave., Dayton, O.
- YATES, Sheldon Smith (Junior, 1912), Instr. Civ. Engrg., Harvard Graduate Sch. of Engrg., Pierce Hall, and 35 Bowdoin St., Cambridge, Mass.
- YAWGER, Edwin (Associate, 1899), Sales Mgr. Denver Dist., The Westinghouse Mch. Co., 1062 Gas and Elec. Bldg., Denver, Colo.
- YEOMANS, Lucien I. (1910), Industrial Engr., Commer. Natl. Bank Bldg., Chicago, and *for mail*, 036 Cobb Blvd., Kankakee, Ill.
- YEREANCE, William B. (1894), Cons. Engr. and Operator for Public Utilities, 128 Broadway, New York, N. Y.
- YERZLEY, William Alfred (1912), Secy. and Engr., Nagle Re-Blade Knife Co., and *for mail*, 39-41 S. 6th St., Newark, N. J.
- YODER, Jacob Herbert (Junior, 1912), Instr., Sch. for Apprentices, Pa. R. R. Co., and *for mail*, 1120 13th Ave., Altoona, Pa.
- YONT, Charles A. (1900), Secy., Flint-Lomax Mfg. Co., 1400-1412 Delgany St., and *for mail*, P. O. Box 165; also, 1301 Glenarm, Denver, Colo.
- YORK, H. W. (1894), Cons. Engr., Am. Smelting & Refining Co., 165 Broadway, New York, and 121 Bay 26th St., Bensonhurst, L. I., N. Y.
- YORK, John James (1910), Ch. Engr., St. Lawrence Sugar Refining Co., Montreal, and *for mail*, 775 Notre Dame St., Maisonneuve, P. Q., Canada.
- YORK, L. D. (1889), Portsmouth, O.
- YORK, Robert (1901; 1908; 1911), V. P. and Treas., York Lumber & Mfg. Co., V. P., Grant Lumber Co., and 1215 Sledge Ave., Memphis, Tenn.
- YORKSTON, John Edward (1912), Engr. in Charge Drafting Dept., Genl. Elec. Co., and *for mail*, 140 Third Ave., Schenectady, N. Y.
- YOUNG, Chas. D. (1902; 1910), Engr. of Tests, Pa. R. R., Altoona, Pa.

- YOUNG, Gilbert A. (1906), Head of Dept. of Mech. Engrg., Purdue Univ., and *for mail*, 725 Highland Ave., Lafayette, Ind.
- YOUNG, John Mason (1902; 1910), Dean of Engrg., College of Hawaii, and Cons. Engr., Honolulu, Hawaii.
- YOUNG, John P. (1899; 1906), Pres., Reinforced Tile Roof Co., Box 43, and 1510 Fifth Ave., Youngstown, O.
- YOUNG, John T. (1900; 1908), Pres. and Genl. Mgr., Muskegon Traction & Ltg. Co., and 95 Jefferson St., Muskegon, Mich.
- YOUNG, William A. (1901; 1905; 1906), Ch. Draftsman, Pawling & Harnischfeger Co., and *for mail*, 306 21st Ave., Milwaukee, Wis.
- ZACH, Louis Morris (Junior, 1912), Constr. Dept., St. Joseph Lead Co., and *for mail*, P. O. Box 286, Bonne Terre, Mo.
- ZACHERT, Arthur Robert (Junior, 1910), Ch. of Production Dept., Babcock & Wilcox Co., Bayonne Plant, and *for mail*, 86 W. 8th St., Bayonne, N. J.
- ZAPP, Louis M. (Junior, 1906), A. L. Drum & Co., 624 Am. Trust Bldg., and 4619 Magnolia Ave., Chicago, Ill.
- ZEHNDER, Chas. H. (1890), Pres., Austen Coal & Coke Co., 140 Cedar St., New York, N. Y., and Allenhurst, N. J.
- ZIMMERMAN, Oliver B. (1905), Advisory Engr., Internatl. Harvester Co., 11-13 Rue D'Arenberg, Brussels, Belgium.
- ZIMMERMANN, John Edward (Junior, 1907), Member of Firm, Day & Zimmermann, Washington Bldg., 608 Chestnut St., Philadelphia, and Rydal, Pa.
- ZIMMERMANN, William Frederick (Junior, 1911), Ch. Draftsman and Designer, Gould & Eberhardt, and *for mail*, 42 Treacy Ave., Newark, N. J.
- ZOHE, Ludwig A. (1903; 1904), Solvay Process Co., and *for mail*, 309 E. Kennedy St., Syracuse, N. Y.
- ZOWSKI-ZWIERZCHOWSKI, S. J. (1910), Prof. Mech. Engrg., Univ. of Mich., and *for mail*, 1304 Geddes Ave., Ann Arbor, Mich.

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Van Keuren, E. B. (Junior), Mech. Engr., 1905 Am. Trust Bldg.
von Goeben, Carl, Wks. Mgr., The Payne & Joubert Mch. & Fdy. Co.
Wells, Edward C., Supt. and Ch. Engr., Hardie-Tynes Mfg. Co.
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Vitoreen, Ernest Vitalis, Supt. Shops, Tenn. Coal, Iron & R. R. Co.

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 Repath, Charles H., Box 889.
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Miami.—Burch, H. Kenyon, Ch. Engr., Inspiration Consltd. Copper Co.
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 Burch, H. Kenyon, Mech. Engr., 314 Central Bldg.
 Carr, Jesse Douglas, 2506 W. 8th St.
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 Garrett, John Anthony (Junior), Gas and Mech. Engr., Fairbanks, Morse & Co., 423-429 E. 3d St.
 Gast, George Fred (Junior), J. G. White & Co., 631 S. Spring St.
 Gump, Walter B. (Junior), Head of Dept. Physics and Elec. Engrg., Y. M. C. A. Tech. Sch., Box 603.
 McGwire, Charles H., Cons. Mech. and Elec. Engr., 507 San Pedro St.
 Ransom, Allan, Beverly Hills.
 Root, Orlando J., Moline Auto Co., Inc., 1518 W. Washington St.
 Selser, Thomas Watson (Junior), Mech. Engr., with Geo. Mitchell of Durango Sinaloa Mines Co.
 Smith, W. W., Sales Engr., Chas. C. Moore & Co. Engrs., 424 I. N. Van Nuys Bldg.
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Wright, Ernest N., Cons. Engr., 691 Huntington Terrace.

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Daval, George K., Mech. Engr., 503 Market St.

Delany, Charles H., Pacific Gas & Elec. Co.

Doble, William A., Ch. Engr., The Pelton Water Wheel Co., 19th and Harrison Sts.

Dorward, David, Jr., Mech. Engr., Genl. Pipe Line Co. of Cal., 149 California St.

Dunn, Kingsley G., V. P., Hunt, Mirk & Co., Inc., 141 Second St.

Eckart, W. R., Cons. Engr., 3014 Clay St.

Fenn, Robert Willson, Mgr. Mfg. Dept., Union Oil Co. of Cal., Mills Bldg.

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Hardy, C. E. (Junior), Industrial Engr., Westinghouse Elec. & Mfg. Co., 165 Second St.

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- Hopps, John Herbert, Cons. Engr., 503 Market St.
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- Hudson, Robert Allan (Junior), Partner, Hunter & Hudson, 746 Monadnock Bldg.
- Hunt, Andrew M., Cons. Engr., 14 Montgomery St.
- Hutchinson, Charles Tripler, Managing Editor, Western Engineering, 420 Market St.
- Hutchinson, Ely Champion, Commer. Engr., The Pelton Water Wheel Co., 19th and Harrison Sts.
- Johnson, William M. (Junior), Panama-Pacific Internatl. Exposition Co., 618 Exposition Bldg.
- Jones, Edward C., Ch. Engr. Gas Dept., Pacific Gas & Elec. Co., 445 Sutter St.
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- Kind, Morris, Genl. Mgr., Pacific Portland Cement Co., 823 Pacific Bldg.
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- Lardner, Henry A., Mgr., J. G. White & Co., Inc., Alaska-Commer. Bldg.
- Leland, Wm. Emmons, Cons. Engr., 832 Merchants Exch.
- McLaren, A. R., Mech. Engr., Otis Elev. Co., N. Point and Beach Sts.
- Markey, Harry Shaffer, Ch. Engr., City Elec. Co., 230 Beach St.
- Moore, R. S., Treas., Moore & Scott Iron Wks.
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- Naphtaly, Sam L., Pres., Oakland & Antioch Ry., 105 Montgomery St.
- Noble, Patrick, Pres., Pacific Rolling Mill Co., 721-722 Crocker Bldg.
- Noyes, Wm. S., Min. Engr., 819 Mills Bldg.
- Paulsmeier, Albert Carl, V. P. and Ch. Engr., Byron Jackson Iron Wks., 357-361 Market St.
- Percy, Earl N. (Junior), Mech. Engr. Fuel Oil Dept., Stand. Oil Co., 461 Market St.
- Plant, John William, Sales Agt. and Engr., Edgar Allen Am. Manganese Steel Co., 649 Monadnock Bldg.
- Potbury, Alfred Henry, Mech. Engr. with Robert Dalziel, Jr., 218 First St.
- Ransom, T. W., Cons. Mech. Engr., Bd. of Pub. Wks.
- Reardon, P. H., Pres. and Genl. Mgr., Compressed Air & Genl. Mchy. Co., 39-51 Stevenson St., and 531 Market St.
- Rix, Edward Austin, Pres. and Mgr., Rix Compressed Air & Drill Co., 219 Spear St.
- Rogers, Edwin Allan (Junior), Asst. in Steam Operation and Maintenance Dept., Pacific Gas & Elec. Co., 445 Sutter St.
- Rowley, Ridgway Lloyd (Junior), Inspc. Engr., Bd. of Fire Underwriters of the Pacific, 914 Merchants Exch.

CALIFORNIA, San Francisco (Continued).

- Sibley, Robert, Prof. Mech. Engrg., Univ. of Cal., Berkeley, and Ch. Editor, Journal of Electricity, Power and Gas, 106 Rialto Bldg.
- Small, H. J., Gen. Supt. M. P., So. Pacific Co., Flood Bldg.
- Smith, Lieut. William Walker, Lieut. U. S. N. U. S. S. California, Pacific Sta.
- Sprado, Ralph, Ch. Engr., Geo. E. Dow Pumping Eng. Co.
- Stillman, Howard, Mech. Engr. and Engr. of Tests, So. Pacific Co., 1180 Flood Bldg.
- Stoddard, Elgin, V. P. and Genl. Mgr., Chas. C. Moore & Co. Engrs., 99 First St.
- Stuart, Percy Rankin, Pacific Coast Mgr., The Roebling Constr. Co., 623-626 Crocker Bldg.
- Stut, J. C. H., Cons. Mech. Engr., 417 Montgomery St.
- Terwilliger, Harry L., First V. P., Harron, Rickard & McCone, 139-149 Townsend St.
- Varney, Frank Hastings, Engr., Pacific Gas & Elec. Co., 1095 Market St.
- Weymouth, C. R., Ch. Engr., Chas. C. Moore & Co. Engrs., 99 First St.
- Wheeler, Frank R., Member of Firm, Guernsey & Wheeler, 436 Rialto Bldg.; also, 700 Central Bldg., Los Angeles.
- Whittlesey, James T., Engr., Claus Spreckels Bldg.
- Wieland, Charles F., Cons. Engr., 914 Mut. Savings Bank Bldg.
- Wilson, Clarence C. (Junior), Mgr., Wilson Mch. Co., 361 Market St.
- Wright, Wm. Quinby, Min. and Civ. Engr., 727 Merchants Exch. Bldg.

Santa Barbara.—Whittemore, John R.

South Pasadena.—Warrington, James N., 2001 LaFrance Ave.

Stanford University P. O.—Cross, Charles N., Asst. Prof. Mech. Engrg., Leland Stanford Jr. Univ.

Durand, Wm. F., Prof. Mech. Engrg., Leland Stanford Jr. Univ.

Eckart, W. R., Jr., Prof. Mech. Engrg., Leland Stanford Jr. Univ.

Lesley, Everett Parker, Asst. Prof. Mech. Engrg., Leland Stanford Jr. Univ.

Marx, Guido Hugo, Prof. Mch. Design, Leland Stanford Jr. Univ.

Stockton.—Maddock, George F., H. M. Byllesby & Co.

COLORADO

Boulder.—Wallace, Jacob H., Mech. Engr., J. P. Karns Tunneling Mch. Co., Mercantile Trust & Bank Co. Bldg.

Colorado Springs.—Buchanan, A. W., Private Secy. to Mrs. Graham E. Babcock.

Denver.—Baker, Frank D., Ch. Engr. Colo. Dept., Am. Smelting & Refining Co., 830 First Natl. Bank Bldg.

Bayle, Emile J., Genl. Engr., Am. Beet Sugar Co.

Comstock, Charles Worthington, State Engr. of Colo., Capitol Bldg., and 409 Boston Bldg.

Hampson, C. M. (Junior), Pres., Hampson-Fielding Engrg. Co., 1711 Wazee St.

Henderson, J. R., Mech. Engr., 1720 California St.

Krebs, A. Sonnin, Mech. Engr., 2340 Ash St.

COLORADO, Denver (Continued).

- Nevill, David J., Mech. Engr., The Stearns Roger Mfg. Co.
 Posselt, Ejnar (Junior), Cons. Engr., Posselt & Co., 511 Ideal Bldg.
 Rattle, Paul S. (Junior), Mech. Engr., Mine & Smelter Supply Co., 17th and Blake Sts.
 Reilly, Wm. J., Dist. Sales Mgr., The Babcock & Wilcox Co., 435 17th St.
 Sethman, George H. (Junior), Mech. and Elec. Engr., 250 Equitable Bldg.
 Shepard, Frank E., Pres. and Mech. Engr., Denver Engrg. Wks., P. O. Box 1802.
 Stearns, Thomas B., Min. and Mech. Engr., 1720 California St.
 Thomas, David G., Ch. Engr., Denver Union Water Co.
 Van Buskirk, Henry C., Supt. M. P., Colo. & So. Ry., 824 Cooper Bldg.
 Walker, Thomas C., Pres., Walker Mfg. Co., 2156 15th St.
 Wilkinson, Thomas L., Cons. Mech. Engr., 407 Boston Bldg.
 Williams, Charles Henry, 1346 St. Paul St.
 Yawger, Edwin, Sales Mgr. Denver Dist., The Westinghouse Mch. Co., 1062 Gas and Elec. Bldg.
 Yont, Charles A., Secy., Flint-Lomax Mfg. Co., 1400-1412 Delgany St.
- Fort Collins.**—Lawrence, J. W., Prof. Mech. Engrg., State Agri. College.
- Hastings.**—Jones, Forrest S. (Junior), Box 52.
- Montrose.**—McKibben, H. B. (Junior), Contr. Engr.
- Paonia.**—Lewis, John Ernest (Junior), P. O. Box 227.
 Shallenberger, Louis R., Civ., Mech. and Irrigation Engr., 205 Second St.
- Pueblo.**—Deuel, Harry Austin, Supt. Open Hearth, Colo. Fuel & Iron Co.
 McKennen, Jacob Bowman (Junior), Mgr., Minnequa Wks., Colo. Fuel & Iron Co.
- Rock Ford.**—Taddiken, J. F., Jr. (Junior), Engr. Am. Beet Sugar Co.
- Trinidad.**—Gauthier, George J., Engr. in Charge Constr., The Trinidad Elec. Transmission Ry. & Gas Co.
- Swink.**—Bullen, Arthur Charles (Junior), Mech. Engr., The Holly Sugar Co.

CONNECTICUT

- Ansonia.**—Bowen, David R., Supt., Farrel Fdy. & Mch. Co.
 Edwards, William B., Mech. Engr., The S. O. & C. Co.
 Gager, Edwin Baker, Jr. (Junior), Scientific Management Engr., Farrel Fdy. & Mch. Co.
 Sampson, George T., Ch. Engr., Ansonia Mfg. Co.; also Brooklyn, N. Y.
 Schneller, Geo. Otto, Treas., Ansonia O. & C. Co.
- Bantam.**—Hill, John W., Sales Engr., Bantam Anti-Friction Co.
 Rogers, Winfield S., Pres., Bantam Anti-Friction Co.
- Branford.**—Hammer, Alfred E., Treas. and Genl. Mgr., Malleable Iron Fittings Co.
- Bridgeport.**—Brewer, Arthur, Supt. of Plant, Bridgeport Brass Co.
 Bullard, Dudley Brewster, Mech. Engr. and Supt., Bullard Mch. Tool Co.

CONNECTICUT, Bridgeport (Continued).

- Card, Frederic M., 116 Edna Ave.
 Clark, Walter R., Mech. Engr., Bridgeport Brass Co.
 Fletcher, E. Leslie, Pres., Fletcher Engrg. Co., Odd Fellows Bldg.
 Hamilton, Edward Waterman (Junior), Mech. Engr., Harvey Hubbell, Inc.
 Hoagland, Frank Oscar, Wks. Mgr., Union Metallic Cartridge Co.
 Johnson, James F. (Junior), Dir. Drafting Dept. and Engrg. Extension Wk., State Trade Sch.
 Kingsbury, J. G., Pres. and Treas., Grant Mfg. & Mch. Co., 90 Silliman Ave.
 Lake, Simon, Pres., Lake Torpedo Boat Co.
 Macdonald, George MacIntyre, Ballistic Engrg., Union Metallic Cartridge Co.
 Pawlett, Louis M. (Junior), Cons. Engr., 231 Fairfield Ave.
 Riker, Andrew L., V. P., Locomobile Co. of Am.
 Staples, H. A. (Junior), Foreman Tube Mill, Bridgeport Brass Co.
 Thomas, George Carlyle (Junior), Asst. Supt., Singer Mfg. Co., Factory 10.
 Webster, William Reuben, Genl. Supt., Bridgeport Brass Co.
- Clinton.**—Krummel, Louis C.
- Collinsville.**—Hill, William, Pres., The Collins Co.
- Danbury.**—Tomlinson, Royal Drew.
- Derby.**—Ahrnke, H. P. (Junior), Dairy Mchy. & Constr. Co.
 Huson, Winfield Scott, Genl. Supt., Whitlock Ptg. Press Mfg. Co.
- Grosvenordale.**—Arnold, Walter S., M. M. and Ch. Engr., Grosvenordale Co.
- Groton.**—Gunn, Thomas McCheyne, Designer, New London Ship & Eng. Co.
 Mayo, John B., Checker Drafting Dept., New London Ship & Eng. Co.
- Hartford.**—Allen, Francis B., V. P., Hartford Steam Boiler Inspc. & Ins. Co.
 Austrom, Charles A., Asst. Ch. Engr., The Travelers Ins. Co. and The Travelers Indemnity Co.
 Billings, Charles E., Pres. and Genl. Mgr., Billings & Spencer Co.
 Billings, Frederic C., V. P., Billings & Spencer Co.
 Blake, Charles S., Secy., The Hartford Steam Boiler Inspc. & Ins. Co.
 Bond, Geo. M., Mech. Engr., 141 Washington St.
 Darlington, Philip J., Pres., The Roto Co.
 Ehbets, C. J., Mech. Engr. and Pat. Expt., Colt's Pat. Fire Arms Mfg. Co.
 Fisher, John, Ch. Engr. Hartford Dist., The Conn. Co.
 Francis, Charles A., Sachs Labs., Inc.
 Gilmour, George, Ch. Engr., Travelers Ins. Co.; also, New York, N. Y.
 Greene, Augustine E., Cons. Mill Engr., 847 Main St.
 Grohmann, Carl L., Ch. Engr., Pratt & Whitney Co.
 Hanson, B. M. W., Wks. Mgr., Pratt & Whitney Co.
 Honiss, William Henry, Mech. Engr. and Solicitor of Patents, 60 Prospect St.

CONNECTICUT, Hartford (Continued).

Howard, Charles P., Pres., James L. Howard & Co.

Hunter, J. S., 15 Washington St.

Jacobs, Ward S., Treas., The Walton Co.

Jeter, Sherwood F., Supv. Inspr., Hartford Steam Boiler Inspec. & Ins. Co.

Knox, Clarence M. (Junior), Mech. Engr., 281 Wethersfield Ave.

London, William James Albert, Ch. Engr., Terry Steam Turbine Co.

Loomis, Burdett, Jr., 843 Prospect Ave.

Lorenz, Wm. A., Mech. Engr. and Solicitor of Patents, 60 Prospect St.

Luther, Flavel Sweeten, Pres., Trinity College.

Lyman, Dwight E., Supt., Asa S. Cook Co., 80 Huyshope Ave.

Merritt, Joseph, Cons. and Constr. Mech. Engr., 60 Prospect St.

Murphy, Edward J., Cons. Mech. Engr., Hartford Steam Boiler Inspec. & Ins. Co.

Newton, Charles E., Treas., Jewell Belting Co., 53 Trumbull St.

Peard, James J., 33 Allen Pl.

Pickop, George B., Genl. Supt., Universal Mch. Screw Co., 806 Windsor St.

Plaine, George Hunter, Supt., Terry Steam Turbine Co.

Pope, Harold L., Mgr., Pope Mfg. Co., West Wks.

Quint, Alanson D., Mgr., Turret Drill Co., 12 Wells St.

Rice, Charles De Los, Genl. Supt., Underwood Typewriter Co., 581 Capitol Ave.

Rosberg, Chas. Andrew (Junior), Ch. Draftsman, Veeder Mfg. Co.

Sachs, Joseph, V. P. and Genl. Mgr., The Sachs Laboratories, Inc., 103-105 Allyn St.

Sears, Willard T., Engr. of Mfg. Com., Pratt & Whitney Co.

Souther, Henry, Pres., Henry Souther Engrg. Co., 11 Laurel St.

Starr, Frederick W., Asst. Mgr. Bicycle and Motorcycle Dept., Pope Mfg. Co.

Townsend, Harry P. (Junior), Secy. and Genl. Mgr., The H. P. Townsend Mfg. Co., 10 Hoadley Pl.

Trowbridge, Amasa, Pres. and Genl. Mgr., The Rhodes Mfg. Co., 32 Union Pl.

Veeder, Curtis H., Pres., Veeder Mfg. Co., 28 Sargeant St.

Whitney, Clarence Edgar, Pres. and Genl. Mgr., The Whitney Mfg. Co.

Meriden.—Horne, George A., Supt., Meriden Fire Arms Co.

Middletown.—Lindquist, Eric Adolf (Junior).

Naugatuck.—Baker, John C. W., M. M., U. S. Rubber Reclaiming Plant.

Payne, Sheldon F., M. M., Goodyear's M. R. Shoe Co.

New Britain.—Brown, Robt. S., Secy., New Britain Mch. Co.

Burgess, Chas. Monroe, 358 W. Main St.

Carter, Edgar Robert, Jr. (Junior), Fafnir Bearing Co.; also, Tompkinsville, N. Y.

Fletcher, James R., Genl. Supt., P. & F. Corbin Mfg. Co.

Hart, Howard S., Pres., Hart & Cooley Co.

Jarvis, Chas. M., Pres., Am. Hardware Corp.; also Berlin, Conn.

Jones, Horace Kimball, Mech. Supt., Corbin Screw Corp.

Stanley, Alix W., Pres., Stanley Rule & Level Co.

CONNECTICUT, New Britain (Continued).

Stone, Elmer B. (Junior), Genl. Supt., Corbin Cabinet Lock Co.
 Voight, Henry Gustave, Asst. Genl. Supt., Russell & Erwin
 Mfg. Co.

New Haven.—Barnum, Geo. S., V. P., The Bigelow Co.

Barnum, Starr H., 2d (Junior), Secy., The Bigelow Co.
 Beach, Harold K. (Junior), Asst. Supvr. of Power Plants, N.Y.,
 N.H. & H.R.R.
 Bigelow, Frank L., Pres., The Bigelow Co.
 Boyer, Frederic Quintard (Junior), Instr. Mech. Engrg., S. S.
 S., Yale Univ., 275 Mason Lab.
 Breckenridge, L. P., Prof. Mech. Engrg., Yale Univ., 412
 Humphrey St.
 Cooley, Erwin Stratton, Supvr. of Power Plants, N. Y., N. H.
 & H. R. R. Co., The Conn. Co., Housatonic Power Co.
 Du Bois, A. Jay, Prof. Civ. Engrg., S. S. S., Yale Univ.
 Henney, John, Duncan Hall.
 Knous, Franklin F., 265 Bassett St.
 Langstroth, Clifford B. (Junior), Mech. Engr., 37 Lake Pl.
 Lockwood, Edwin H., Asst. Prof. Mech. Engrg., S. S. S., Yale
 Univ.

McBane, Walter Watson, Asst. Engr., The Conn. Co., Griswold
 Bldg.

MacArthur, Robert, Jr., Supt. M. P., Sargent & Co.

Mackintosh, Frederick L., Asst. Genl. Supt., Winchester Re-
 peating Arms Co.

Marshall, Wm. Crosby, Asst. Prof. Mch. Design, S. S. S., Yale
 Univ., 114 Winchester Hall.

Murphy, John Killam (Junior), Supt. of Constr., Murphy &
 Dana of New York, N. Y., 839 Chapel St.

Norcross, J. Arnold, Secy. and Treas., New Haven Gas Light
 Co.

Pangburn, Dwight Boyce (Junior), Instr., S. S. S., Yale Univ.,
 36 N. Sheffield Hall.

Penney, Rupert L. (Junior), Testing Engr., Winchester Re-
 peating Arms Co.

Pugsley, Edwin (Junior), Winchester Repeating Arms Co.

Richards, Charles B., Prof. Emeritus, Mech. Engrg., Yale Univ.

Roe, Joseph W., Asst. Prof., S. S. S., Yale Univ.

Sargent, Henry Bradford, Sargent & Co.

Scott, Charles Felton, Prof. Elec. Engrg., S. S. S., Yale Univ.

Seward, Herbert Lee (Junior), Instr. Mech. Engrg., S. S. S.,
 Yale Univ.

Stone, J. Wheaton, Treas. and Mgr., East. Mchy. Co.

Wildin, George W., Mech. Supt., N. Y., N. H. & H. R. R.

New London.—Hartford, Claude (Junior), Engr., Conn. Turbine
 Mfg. Co.

McCulloch, Alexander, New London Ship & Eng. Co.

Rearick, Chas. B., V. P. and Mgr., Conn. Turbine Mfg. Co.

Whiton, Lucius E., Mgr. and Mech. Engr., D. E. Whiton Mch.
 Co., 190 Howard St.

Norwalk.—McElroy, Joseph A., Genl. Municipal and R. R. Contr.,
 Wall St.**Norwich.**—Martin, Edward J. (Junior), Asst. Supt. and Mgr. of
 Production, Hopkins & Allen Arms Co.**Plainville.**—Newton, Charles Hollister, Genl. Mgr., The Osborne
 & Stephenson Mfg. Co.

CONNECTICUT (Continued).**Plantsville.**—Lane, Almeron M.**Portland.**—Hall, Stephen S., Secy., The Pickering Governor Co.
Pascall, Richard Henry, Pres., Pickering Governor Co.**Sound Beach.**—McMurtry, Alden Lothrop, Cons. Engr.**South Manchester.**—Miller, George H., Supv. Engr., Cheney Bros.**South Norwalk.**—Hill, Ebenezer, Genl. Mgr., Norwalk Iron Wks. Co.

Hill, Ebenezer, Jr., Secy. and Supt., Norwalk Iron Wks. Co.

Jennings, Irving Callender (Junior), Nash Engrg. Co., 40 Water St.

Mathews, William Edwin, Supvr., Inspec. and Tests, Norwalk Iron Wks. Co.

Stamford.—Clark, Dean.

Emery, Albert H., Civ. and Mech. Engr., 788 Main St.

Leland, George B., Supt., Stamford Gas & Elec. Co., 11 Bank St.

Lewis, Rollin C., Asst. Supt. Bank Lock Dept., Yale & Towne Mfg. Co.

McBride, James, Ch. Engr., Stamford Mfg. Co.

Regan, Joseph Charles, Supt. Productive Efficiency, Yale & Towne Mfg. Co.

Taylor, Warren H., Supt. Bank Lock Dept., Yale & Towne Mfg. Co.

Towne, Henry R., Pres., Yale & Towne Mfg. Co.

Weber, Geo. A., 71 Courtland Ave.

Thompsonville.—Upson, Lyman A., Treas., Upson-Martin Co.**Torrington.**—Alvord, C. H., V. P. and Genl. Mgr., The Hendey Mch. Co.

Norton, Wendell P., Supt., Hendey Mch. Co.

Waterbury.—Alden, John Douglas, Gas Engr., Asst. Supt., The United Gas Improvement Co., 83 Center St.

Alexander, Louis Albion, Genl. Store Keeper, Genl. Supt.'s Office, Am. Brass Co.

Bristol, Wm. H., Pres., The Bristol Co.

Bronson, Edward L., M. M., Shoe Hardware Co.

Campbell, Andrew C., Cons. Engr., Pres. and Mgr., Andrew C. Campbell, Inc., 42 State St.

Castle, John Samuel Parsons (Junior), Ch. Engr., Benedict & Burham Mfg. Co.

de Lancey, Darragh, 52 Pine St.

Doolittle, Warren P. (Junior), Designing Engr., The Waterbury Mfg. Co.

Goss, Edward O., Asst. Treas., Scovill Mfg. Co.

Isbell, Howard L. (Junior), Asst. Ch. Engr., Am. Brass Co.

Johnson, Edward Willis, 70 Chestnut Ave.

Koester, Herman (Junior), Mech. Supt., The Bristol Co.

Leggett, George R., Asst. to Genl. Supt., Scovill Mfg. Co.

Lepper, John G., Cons. Engr., P. O. Box 547.

Lummis, Charles W. Scovill Mfg. Co.

Martus, Martin Lorenz, Mech. Engr., Asst. Mgr. and Secy., The Waterbury Battery Co.

Rowbottom, George, Pres., Rowbottom Mch. Co.

Sanderson, E. S., care of Scovill Mfg. Co.

Summey, David Long, Mech. Engr., Chase Rolling Mill Co.

Thompson, Hugh L.

CONNECTICUT (Continued).**West Hartford.**—Neilson, Frederick C., P. O. Box 472.

Wolcott, Henry A., Mech. and Civ. Engr.

Willimantic.—Millett, Kenneth Ballard (Junior), Local Engr.,
Willimantic Mills of The Am. Thread Co.**Windsor Locks.**—Horton, S. Ellsworth, Pres. and Genl. Mgr., E.
Horton & Son Co.**DELAWARE****Edge Moor.**—Girvin, Chas. J., Supt., Edge Moor Iron Co.**New Castle.**—Mahon, Wm. L'E, Sales Engr., Edgar Allen Am.
Manganese Steel Co.**Wilmington.**—Betts, Alfred, 906 Adams St.Darling, Philip G., Ch. Engr. Exper. Sta., E. I. du Pont de
Nemours Powder Co.De Cazenove, Louis A., Jr., Mech. Engr. Engrg. Div., E. I. du
Pont de Nemours Powder Co.du Pont, Coleman, Pres., E. I. du Pont de Nemours Powder
Co., 964 du Pont Bldg.Forgy, J. Edmonds (Junior), Ch. Engr., Chas. Warner Co., Du
Pont Bldg.

Fulenwider, Henry L.

Hazard, Vincent G., Designer of Paper Mch., The Pusey &
Jones Co.Jordan, William Allen, Genl. Mgr., East Cement Gun Co., 284
Du Pont Bldg.

Milner, Bert Branson (Junior), Pa. R. R. Co.

Moreton, George Wm., Genl. Supt., Betts Mch. Co.

Moxham, Egbert, Asst. Mgr. Development Dept., E. I. du Pont
de Nemours Co.

Parsons, George K., Asst. to Pres., Am. Vulcanized Fibre Co.

Pusey, Charles W., Inspec. Engr., The Pusey & Jones Co.

Smith, Robert W., V. P., Hilles & Jones Co.

Spruance, Wm. C., Jr., du Pont Bldg.

Sturgis, Wm. Bayard (Junior), E. I. du Pont de Nemours Pow-
der Co.Tallman, Frank G., Dir. of Purchases, E. I. du Pont de Ne-
mours Powder Co., du Pont Bldg.

Trump, Charles N., 1311 W. 13th St.

Van Trump, Charles R., 305 W. 8th St.

DISTRICT OF COLUMBIA**Washington.**—Bixby, Genl. William H., U. S. Engr., 735 Southern
Bldg.Carlsson, Carl A. V., Ordnance Engr., Bureau of Ordnance,
Navy Dept.Carty, Roy Franklin (Junior), Mech. Engr., Div. of Loco. Boiler
Insp., Interstate Commerce Com.Cone, Admiral Hutchinson Ingham, Engr. in Ch. Bureau of
Steam Engrg., Navy Dept.Coombs, Howard A. (Junior), Pat. Atty. and Expt., 316-317
McGill Bldg.Doying, William Albert E., Inspec. Engr., Isthmian Canal Com.,
Mills Bldg. Annex.

Frederick, Floyd W., Prof. Mech. Engrg., Howard Univ.

Gillis, H. A., Mech. Engr., Home Life Bldg.

DISTRICT OF COLUMBIA, Washington (Continued).

- Hersey, Mayo Dyer (Junior), Asst. Physicist, U. S. Bureau of Standards.
- Hollerith, Herman, 1054 31st St.
- Holmes, Joseph Austin, Dir., Bureau of Mines.
- Holmes, Urban Tigner, Commander, U. S. N., Bureau of Steam Engrg., Navy Dept.
- Jakobsson, Herman, Cons. Engr., Victor Bldg., 724 Ninth St., N. W.
- Johnson, Arthur E., Designer, Ordnance Office, War Dept.
- King, Frank B., Cons. Marine Engr. and Naval Arch., 1442 Rhode Island Ave.
- Knight, Hervey S., Pat. Lawyer and Expt., 726 Ninth St., N. W.
- Lawton, James Edmund, Ch. Inspr., Isthmian Canal Com.
- Metz, Walter R., Supt. of Bldgs., Govt. Ptg. Office.
- Morton, Geo. L., Prin. Examiner, Instruments of Precision, Rm. 264, U. S. Pat. Office.
- Norton, Harold P., Capt., U. S. N., Mem. Bd. of Inspc. for Shore Stas., Navy Dept.
- Peel, Fred Pardington (Junior), Government Draftsman and Engr., and Cons. Wk., 1419 Clifton St.
- Pollard, Willard Lacy (Junior), Asst. Examiner, Pat. Office, Div. 5.
- Powell, John Edgar, Cons. Engr., 418 Union Trust Bldg.
- Raynal, Alfred H., Mech. Engr., Bureau of Steam Engrg., Navy Dept.
- Ridgely, William Barret, 1908 Q St., N. W.; also, New York, N. Y.
- Robinson, Garland P., Asst. Ch. Inspr., Locomotive Boilers, Interstate Commerce Com.
- Schoenborn, W. E. (Junior), Solicitor of Patents, Expt. in Pat. Causes, McGill Bldg., 908-912 G St., N. W.
- Shepard, Louis A., Munsey Bldg., and 2138 California Ave., N. W.
- Simpson, George R., Prin. Examiner in Charge Ry. and Rolling Stock Div., U. S. Pat. Office, Rm. 304.
- Sponsler, Charles Fred'k, Supt. of Mech. Plant, Bureau of Standards, Dept. Commerce and Labor.
- Tait, Godfrey M. S., Cons. Engr., 1413 G St., N. W.; also, 90 West St., New York, N. Y.
- Thomas, Glegge (Junior), B. F. Sturtevant Co., 1006 Loan and Trust Bldg.
- Truell, Karl O., 1352 Parkwood Pl.
- Upton, William Bayly, Cons. Engr., Washington Loan & Trust Bldg., 902 F St., N. W.
- Wheeler, Chas. Van Cise, Supt., Washington Steel & Ordnance Co., P. O. Box 812.
- Wheeler, Earl (Junior), Genl. Mgr., Elec. Speedometer Co., Evans Bldg.

FLORIDA

- Bartow.**—McLeod, Adolphus A., Engr. and Supt., Fla. Phosphate Min. Corp.
- Palm Beach.**—Day, Charles Iven (Junior), Ch. Engr., Fla. East Coast Hotel Co.

GEORGIA

- Atlanta.**—Anderson, Harry Warfield, Dist. Sales Mgr., Am. Motors Co., 5 E. 3d St.
 Coon, J. S., Prof. Mech. Engrg. and Drawing, Supt. of Shops, Sch. of Tech.
 Dallis, Park Andrew, Mill Arch. and Engr., 913 Candler Bldg.
 Davidson, Archer, Dist. Engr., Westinghouse Mch. Co., 1326 Candler Bldg.
 Fennell, Benjamin C. (Junior), Contr. Engr., Empire Bldg.
 Hillyer, George, Jr., Cons. Engr., 568 W. Peachtree St.
 Holmes, Andrew A. (Junior), Pres. and Treas., Hancock, Holmes Fdy. Mch. Wks., P. O. Box 461.
 Hutchinson, Arthur H., Sales Engr., Frick Co., 406-407 Atlanta Natl. Bank Bldg.
 Neely, Frank H. (Junior), Industrial Engr., 70 Madison Ave.
 Nesbit, Joseph Newton Gray, Prof. Exper. Engrg., Ga. Sch. of Tech.
 Poole, Cecil P., Cons. Engr., 1021 Candler Bldg.
 Scott, Earl Francis, Mech. Engr. in Charge Engrg. Dept., Atlanta Office, Genl. Fire Extinguisher Co., 276 Marietta St.
 Snyder, William R. (Junior), Pur. Agt., Fulton Bag & Cotton Mills.
Calhoun.—Wright, Calvin Shelor (Junior).
Clarkston.—Kenner, Ernest Rodham (Junior).
Macon.—Jackson, Percy (Junior), Ch. Engr., J. S. Schofield's Sons Co., P. O. Box 93.
 Neely, Fred. L. (Junior), Central Ga. Power Co.
 Nott, Albin James (Junior), Designing Engr., Central Ga. Power Co., Public Utilities Bldg.
 Porter, John A., Genl. Supt., Bibb Mfg. Co.
Newnan.—Cole, Frank B., Ch. Engr., R. & D. Cole Mfg. Co.
Savannah.—Gaines, Frederic F., Supt. M. P., Central of Ga. R. R.
 Lamar, Philip Rucker, The So. Cotton Oil Co., Savannah Bank & Trust Co. Bldg.

HAWAII

- Ewa, Oahu.**—Hind, R. Renton (Junior), Ch. Engr., Ewa Plantation Co.
Honolulu.—Gartley, Alonzo, Cons. Engr., C. Brewer & Co., Ltd.
 Haney, James Briggs (Junior), U. S. Engr. Office, McCandless Bldg.
 Hedemann, Christian J., Genl. Mgr., Honolulu Iron Wks. Co.
 Sheedy, Joseph Edward, Supt. Engr., Hawaiian Elec. Co., Ltd.
 Young, John M., Dean of Engrg., College of Hawaii, and Cons. Engr.

IDAHO

- Boise.**—Trask, Walter H., Jr. (Junior), Sales Mgr., Idaho Oregon Light & Power Co.
 Wegg, David S., Jr. (Junior), Engr., The Beaver River Power Co.; also, Chicago, Ill.
Moscow.—Hutton, Sol Elwood, Wks. Mgr. and Ch. Engr., Idaho-Natl. Harvester Co.
Orofino.—Hassan, Robert D., Mech. Engr., Orofino Portland Cement Co., and Edmonton Portland Cement Co., Edmonton, Canada; also, Spokane, Wash.
Pocatello.—Lillie, Grant W. (Junior), Asst. Supt., Oregon Short Line R. R. Co.

ILLINOIS

- Alton.**—Duncan, William Millen, V. P., Ill. Stoker Co., Genl. Mgr., Duncan Fdy. Co., Secy. and Treas., Am. Coal Washing Co.
- Anna.**—Gardner, Thomas M., Cons. Engr.
- Argo, Cook Co.**—Jefferies, Frederick Lester, Supt., Corn Products Refining Co.
- Aurora.**—Dull, Raymond Wm., Pres., Raymond W. Dull & Co. McClatchey, A. F., 132 N. 4th St.
- Bradley.**—Morgan, David Bradley, Wks. Mgr., David Bradley Mfg. Co.
Wachs, Theodore (Junior), Mech. Engr., Sears, Roebuck & Co.
- Cartersville.**—Richart, Fred W., Dist. Supt., Central Ill. Public Service Co.
- Chicago.**—Abbott, William L., Ch. Operating Engr., Commonwealth Edison Co., 120 W. Adams St.
Adgate, Frederick Whitney, West. Mgr., The Foundation Co., 640 Rookery Bldg.
Akerlind, G. A., Cons. Engr., 619-620 City Hall Sq. Bldg.
Albright, H. Fleetwood, Genl. Supt., West. Elec. Co., Hawthorne Sta.
Allen, Henry Asa, Cons. Engr., City Hall.
Ames, Joseph H., Ch. Engr., Am. Car & Fdy. Co., 414 Ry. Exch.
Anderson, Emanuel, Sargent & Lundy.
Angus, Joseph Johnson, Mech. Engr., 3226 Carroll Ave.
Austin, Adolph Odell (Junior), Ch. Draftsman, The Lassen Ice Mch. Co., 5853 Evanston Ave.
Baehr, William Alfred, Cons. Engr., Peoples Gas Bldg.
Bailey, Alex. D. (Junior), Asst. Ch. Engr., Stas. 2 and 3, Commonwealth Edison Co.
Baker, Fred L., Mech. Engr., Chicago Steel Car Co.
Baldwin, C. Kemble, Ch. Engr., Robins Conveying Belt Co., 1070 Old Colony Bldg.
Balzer, Fritz (Junior), Mech. Engr. Charge of Drafting Dept., Troy Laundry Mchy. Co., Ltd., La Salle and 23d Sts.
Bancroft, George Arthur (Junior), Exper. Dept., Tractor Wks., Internatl. Harvester Co.
Barbieri, Cesare, Cons. Mech. Engr., Old Colony Bldg., Dearborn and Van Buren Sts.
Barnes, Charles B., Wks. Engr., West. Elec. Co., Hawthorne Sta.
Bates, Adelmor M., Pres., Bates Valve Bag Co., 11-17 S. Desplaines St.
Batten, Percy H., Supt., West. Foundries, Am. Brake Shoe & Fdy. Co.
Bean, William Lloyd, Mech. Rep., Jacobs-Shupert U. S. Firebox Co., 339 Railway Exch.
Beck, Charles Edgar (Junior), Sales Mgr., De La Vergne Mch. Co., 1556 Monadnock Blk.
Bibbins, James Rowland, Engr. with Bion J. Arnold, 105 S. La Salle St.; also, San Francisco, Cal.
Bird, Paul P., Commonwealth Edison Co., 120 W. Adams St.
Birdsey, Charles Robt., Ch. Engr., U. S. Gypsum Co., 200 Monroe St.
Bishop, Frank, V. P., Auto-Elec. Refrigerating Co., 243 Ry. Exch.; also, South Bend, Ind.

ILLINOIS, Chicago (Continued).

- Blauvelt, Albert, Assoc. Mgr., West. Factory Ins. Assoc., Insurance Exch. Bldg.
- Bogardus, Henry A., Pres. and Treas., Bogardus Co., 159 W. Huron St.
- Bourne, George L., V. P., Loco. Superheater Co., Peoples Gas Bldg.
- Bowen, Harrison Seba, Mech. Engr., Robert W. Hunt & Co., 2200 Ins. Exch. Bldg.
- Bower, J. G., Hale & Kilburn Co., 605 McCormick Bldg.
- Brady, Joseph Benjamin (Junior), Jos. T. Ryerson & Son, 16th and Rockwell Sts.
- Brill, Geo. M., Brill & Gardner, Mech., Elec. and Arch. Engrs., 1134-1135 Marquette Bldg.
- Bronaugh, Will Logan, Secy. and Treas., Iroquois Engrg. Co., 1507 Fisher Bldg.
- Brydon, Herbert Boyd, Mech. Engr., H. M. Byllesby & Co.
- Buker, Henry, West. Rep., Brown & Sharpe Mfg. Co., 626-630 Washington Blvd.
- Buss, William Laing, Mgr. Chicago Office, Pittsburgh Valve, Fdy. & Constr. Co., 1215 Marquette Bldg.
- Byllesby, H. M., Pres., H. M. Byllesby & Co., Ins. Exch. Bldg.
- Carter, Henry W., Mech. Expt., 635 Monadnock Blk.
- Case, G. Harry, Ch. Mech. Engr., Jos. T. Ryerson & Son.
- Casteels, Aime (Junior), 3210 Howard St.
- Chalmers, William J., Chalmers & Williams, 72 W. Adams St.
- Chamberlain, Paul Mellen, Cons. Engr., Chamberlain & Howell, Engrs., 1522 Marquette Bldg.
- Charter, James Adams, Mech. Engr., Austin Mfg. Co.
- Christensen, Chas. C., Estimating Engr., Allis-Chalmers Co.
- Christensen, Otto R. (Junior), V. P., Geo. W. Diener Mfg. Co., 400-416 Monticello Ave.
- Clifford, Oliver Chas., Dept. of Elec. Engrg., Armour Inst. of Tech., 33d and Armour Aves.
- Coes, Harold V. O. (Junior), Mgr. Chicago Office, Lockwood Greene & Co., First Natl. Bank Bldg.
- Crocker, Arthur George (Junior), Leading Draftsman, Chicago & Northwestern Ry.
- Davidson, Charles Jackson, Member of Firm, Woodmansee, Davidson & Session, Inc., 1048 First Natl. Bank Bldg.
- DePuy, C. E., Prof. Mch. Constr., Lewis Inst.
- Deverell, Harry, Constr. Supt., Macdonald Engrg. Co., 551 Monadnock Bldg.
- DeWolfe, Edward Charles, Member of Firm, Russell-DeWolfe Co., 537 S. Dearborn St.
- Dingee, W. W., Ret. Mech. Engr., 5811 Madison Ave.
- Dirks, Henry B. (Junior), 2459 Montrose Ave.
- Douglas, Courtney Carlos, Dist. Mgr. Turbine Sales, Genl. Elec. Co., 1023 Monadnock Bldg.
- Easthope, Joseph, M. M., Ill. Steel Co.'s South Wks.
- Ellicott, Edw. Beach, Elec. Engr., Sanitary Dist. of Chicago, 1500 Am. Trust Bldg.
- Elliott, W. E., Suptg. Engr., Goodrich Transit Co.
- Ellison, Lewis Martin, Steam Expt., Designer and Mfr., 6238 Princeton Ave.

ILLINOIS, Chicago (Continued).

- Elmes, Chas. W., Pres., Chas. F. Elmes Engrg. Wks., Morgan and Fulton Sts.
- Emrie, Almon, 5337 Madison Ave.
- Ericson, John Ernst, City Engr. and Chairman Subway and Harbor Com., City of Chicago, City Hall Sq. Bldg.
- Ewen, John Meiggs, Cons. Engr., Pres., John M. Ewen Co., 525 Rookery Bldg., and Pres., Stand. Alcohol Co.
- Fallon, John (Junior), Cons. Engr., Union Stock Yards.
- Faulkner, David Sinclair (Junior), Otto Gas Eng. Wks., 15-17 S. Clinton St.
- Feiker, Fred Morris, Managing Editor, Factory, and Book Dept., The System Co.
- Fergus, William L., W. L. Fergus & Co., 1509 Fisher Bldg.
- Fitch, Alfred Lyon, 1132 E. 45th St.
- Fitch, Claude E., Cons. Mech. Engr., V. P., Allen Engrg. Co., 1233 First Natl. Bank Bldg.
- Forsyth, Robert, Cons. Engr., 1159 Rookery Bldg.
- Forsyth, William, Mech. Engr., Windermere Hotel.
- Fraser, Norman D., Pres., Chicago Portland Cement Co., 30 N. La Salle St.
- Frith, Arthur J., Assoc. Prof. Mech. Engrg., Armour Inst. of Tech., 33d and Armour Aves.
- Frost, Harwood, Pres. and Ch. Engr., Brown Portable Elev. Co., 10 S. La Salle St.
- Gardner, H. C., Member of Firm, Brill & Gardner, 1135 Marquette Bldg.
- Garland, Claude Mallory, Combustion Engr., Woodmansee, Davidson & Sessions, Inc., 1048 First Natl. Bank Bldg.
- Gates, Philetus W., Pres., Hanna Engrg. Wks., 2059 Elston Ave.
- Gebhardt, George F., Prof. Mech. Engrg., Armour Inst. of Tech.
- Gifford, Byron T. (Junior), Mgr. Genl. Engrg. Dept., Am. Dist. Steam Co., 900 First Natl. Bank Bldg.
- Gifford, Robt. L., Pres., Illinois Engrg. Co., Monadnock Bldg.; also, Pasadena, Cal.
- Gillette, Halbert Powers, Editor-in-Chief, Engineering and Contracting, 608 S. Dearborn St.; also, Germantown, Pa.
- Gilman, Francis L., Supt., West. Elec. Co., Hawthorne Sta.
- Goetz, Fred W., V. P., Goetz Co., Clybourn Ave. and Willow St.
- Green, Wm. O., Member of Firm, Ogden, Sheldon & Co., 192 N. Clark St.
- Hagar, Edw. McKim, Pres., Universal Portland Cement Co., 72 W. Adams St.
- Hall, Harris Forster, Secy. and Treas., Safety Equip. Mfg. Co., Fisher Bldg.
- Hamilton, Alex. K., Pres., M. H. Treadwell Co. of Ill., 530 Commer. Natl. Bank Bldg.
- Hawley, Wm. Parker, Asst. Prof. Charge Mech. Drawing, Lewis Inst.
- Heaton, Herman C. (Junior), Mech. Engr., Sargent & Lundy, Ry. Exch.
- Heberd, Loren Loomis (Junior), Steam Expt., South Wks., Ill. Steel Co.
- Hecht, Julius Lawrence, Pub. Service Co. of No. Ill., 137 S. La Salle St.

ILLINOIS, Chicago (Continued).

- Hendee, Edward Thomas, Asst. to Pres., and Mgr. Mchy. Dept., Joseph T. Ryerson & Son, V. P., Lennox Mch. Co.
- Henes, Harry W. (Junior), Mech. Engr., A. Bolter's Sons, Rm. 612, 118 N. La Salle St.
- Hill, Robert J., 5027 Madison Ave.
- Robert, Stephen G., Cons. Engr., 179 Washington St.
- Hogue, Oliver D., Treas., Goulds Mfg. Co. of Ill.
- Hollenberger, Theodore James (Junior), Mech. Engr., Ill. Engrg. Co.
- Houser, Arthur M., Mech. Expt., Crane Co.
- Howard, Chas. Alton (Junior), West. Mgr., Gunn, Richards & Co., First Natl. Bank Bldg.
- Howell, Frank B., Asst. Genl. Mgr. Sales, Am. Radiator Co., 816 S. Michigan Ave.
- Howell, Sylvester S., Cons. Engr., Chamberlain & Howell, Engrs., 1522 Marquette Bldg.
- Hughes, Davydd C., Genl. Supt., Rogers Addresser Co.
- Humes, W. Sharon (Junior), Sales Engr., Genl. Ry. Supply Co., 531 Marquette Bldg.
- Humphrey, Clifford Wayne, Cons. and Designing Engr., 818 Rookery Bldg.
- Hunt, Robert W., Robert W. Hunt & Co., 2200 Insurance Exch. Bldg.
- Jackson, F. W., Dist. Mgr., Harrisburg Fdy. & Mch. Wks., 424 New York Life Bldg.
- Jackson, Wm. B., D. C. & Wm. B. Jackson, Engrs., Harris Trust Bldg., 111 W. Monroe St.
- Jacobs, Henry William, Pres., Orweld R. R. Service Co., 339 Ry. Exch.; also, Topeka, Kan.
- Johnson, Bradley S., Rep., The T. H. Symington Co., 623 Peoples Gas Bldg.
- Jones, John Lucien (Junior), Catalog Editor, Internatl. Harvester Co. of Am., 824 Eastwood Ave.
- Jones, W. Clyde (Junior), Lawyer, Genl. and Pat. Law, Rm. 1610, 105 W. Monroe St.; also New York, N. Y.
- Junkersfeld, Peter, Asst. to Second V. P., Commonwealth Edison Co.
- Keil, Gustave B., M. M., Federal Elec. Co., Lake and Desplaines Sts.
- Kellogg, Harry F., Mgr. of Sales, Whipple Car Co., Rm. 624, 72 W. Adams St.
- Kelman, John H., 1574 Crossing St.
- Kimber, George Alfred, Mfr., 557-561 W. Jackson Blvd.
- Kimman, Martin T., Ch. Engr. and Supt., L. J. McCormick Estate, 332 S. Michigan Ave.
- King, Chas. G. Y., Constr. Engr., Commonwealth Edison Co., N. W. Sta.
- Krehbiel, Frederick A., Pres., Krehbiel Co., 1712 Marquette Bldg.
- Lavery, George L., 5453 Kenmore Ave.
- Lea, Henry I., Cons. Gas Engr., 1521 Peoples Gas Bldg.
- Leonard, Arthur G., Pres., Union Stock Yard & Transit Co. of Chicago, Union Stock Yards.
- Levin, Arvid Michael, Mech. Engr., 925 Monadnock Bldg.

ILLINOIS, Chicago (Continued).

- Lindberg, Fritz A., Member of Firm, Brill & Gardner, Engrs.,
1135 Marquette Bldg.
- Lindquist, Edward W., Sales Engr., Allis-Chalmers Co.
- Lockett, Kenneth, V. P., Orr & Lockett Hardware Co., 14-16 W.
Randolph St.
- Lofts, David, Constr. Engr., Am. Steel Foundries.
- Lord, Charles Edward, Genl. Pat. Atty., Internatl. Harvester
Co., 606 S. Michigan Ave.
- Lord, John E., Dist. Mgr., Buckeye Eng. Co., 1249 Marquette
Bldg.
- Louer, Lewis S., West. Mgr., F. W. Dodge Publishing Co., 842
Monadnock Bldg.
- Ludlow, Charles G., West. Mgr., Crosby Steam Gage & Valve
Co., Great Lakes Bldg., 180 N. Market St.
- Luhr, Otto, Cons. Engr., 154 W. Randolph St.
- Lunger, Waldo G., Mgr. Furnace Dept., Am. Shop Equip. Co.,
332 S. Michigan Ave.
- Lyman, James, Sargent & Lundy, cor. Jackson and Michigan
Blvds.
- McKee, Walter Smart, V. P., Edgar Allen Am. Manganese Steel
Co., 1850 McCormick Bldg.
- MacFarland, Helon Brooks, Engr. of Tests, Atchison, Topeka
& Santa Fé Ry. Co., 1537 Ry. Exch.
- MacKenzie, Donald (Junior), Asst. Mgr. Constr. Dept., Swift &
Co., Stock Yards.
- Magee, John (Junior), First Natl. Bank Bldg.
- Marsh, Thomas Alfred, Combustion Engr., Green Engrg. Co.,
28 E. Jackson St.
- Matchett, James C. (Junior), Sales Engr., Ill. Engrg. Co., 1205
Monadnock Bldg.
- Maury, Dabney Herndon, Cons. Engr., 1137-1138 Monadnock
Blk.
- May, Edwin Augustus, Asst. Mgr. Boiler Dept., Am. Radiator
Co.
- Melcher, Charles W., Secy. and Genl. Mgr., Ingersoll-Rand Co.
of Ill., 1507 Peoples Gas Bldg.
- Merrill, J. J., Ch. Engr., Corn Products Refining Co., 217 E.
Illinois St.
- Mitchell, John Hennon, Mgr. of Sales West. Dist., Pressed
Steel Car Co., West. Steel Car & Fdy. Co., 1470 Old Colony
Bldg.
- Mohr, Louis, Secy. and Cons. Engr., John Mohr & Sons, 349 W.
Illinois St.
- Monroe, Wm. S., Mech. Engr., Sargent & Lundy, 1720 Ry.
Exch. Bldg.
- Montgomery, H. M., Dist. Mgr., Alberger Pump & Condenser
Co., 137 S. LaSalle St.
- Moody, William O., Mech. Engr., Ill. Central R. R.
- Morava, Wensel, Pres., Morava Constr. Co.
- Morehead, George Lawrence, Supt. of Constr., Link-Belt Co.
- Morse, Chas. H., Jr., Pres., Fairbanks-Morse Mfg. Co., 900 S.
Wabash Ave.
- Moseley, Alexander Willett, Prof. Mechanics, Head Dept.
Engrg., Lewis Inst.
- Murphy, John Z., Ch. Engr., Chicago Rys. Co., 700 Borland
Bldg.

ILLINOIS, Chicago (Continued).

- Murray, Charles R., V. P., Treas. and Charge of Mfg., Barnhart Bros. & Spindler, 168-172 W. Monroe St.
- Naylor, Chas. Wm., Ch. Engr., Marshall Field & Co., 121 N. State St.
- Neiler, Samuel Graham, Cons. Mech. and Elec. Engr., and Pres., Neiler, Rich & Co., 1407-1411 Manhattan Bldg.
- Nistle, George W., Secy., Ill. Engrg. Co., 315 Dearborn St.
- O'Neill, J. G., Contr. Engr., 304 Rookery Bldg.
- Otis, Spencer, Mfr., 523 Ry. Exch.
- Patitz, Gerhardt J., Ch. Engr., Peter Schoenhofen Brewing Co., 526 W. 18th St.
- Paul, Charles Edward, Assoc. Prof. Mechanics, Armour Inst. of Tech.
- Pearson, Walter B., Pres., Stand. Screw Co., 81 E. Madison St.
- Peck, Staunton B., V. P., Link-Belt Co., 39th St. and Stewart Ave.
- Peebles, Thomas Armstrong, Designing Engr., Green Engrg. Co., 28 E. Jackson St.
- Pennock, George Alger (Junior), Asst. Supt. Service and Maintenance, West. Elec. Co., Hawthorne Sta.; also Weston, Mass.
- Pettis, Clifton D., Am. Brake Shoe & Fdy. Co., 1414 McCormick Bldg.
- Piez, Charles, Pres., Link-Belt Co., 39th St. and Stewart Ave.
- Poppenhusen, P. Albert, Pres., Green Engrg. Co., 28 E. Jackson St.
- Post, George Adams, Jr. (Junior), Sales Mgr., Stand. Coupler Co., 1005 Peoples Gas Bldg.
- Prosser, Joseph George, 1301 E. 60th St.
- Pulsifer, Harold M., 1622, 431 S. Dearborn St.
- Puchta, Edward, Asst. Supt., West. Elec. Co., Hawthorne Sta.
- Reeder, Nathaniel S., Jr., West. Steel Car & Fdy. Co., 1470 Old Colony Bldg.
- Reid, John Simpson, Sr., Asst. Prof. Mech. and Mch. Drawing, Armour Inst. of Tech.
- Replogle, Mark A., Sales Engr., The Lombard Governor Co., 1508 Fisher Bldg.; also, Akron, O.
- Rice, Arthur L., Managing Editor, The Practical Engineer, Cons. on Power Plant, Engrg., 537 S. Dearborn St.
- Rich, Edward P., V. P. and Secy., Neiler, Rich & Co., 1409 Manhattan Bldg.
- Righter, Addison A., Dir. and Mech. Engr., John M. Ewen Co., 573 Rookery Bldg.
- Robinson, J. Albert M. (Junior), Hyd. Engr., The Am. Well Wks., 454 First Natl. Bank Bldg.
- Rumely, William N., Pres., Rumely-Wachs Mchy. Co., 121 N. Jefferson St.
- Sargent, Frederick, Mech. Engr., Sargent & Lundy, Ry. Exch.
- Saxon, William, V. P. and Wks. Mgr., Miehle Ptg. Press & Mfg. Co.
- Sayers, William W., Engr., Link-Belt Co., 39th St. and Stewart Ave.
- Schenck, Charles (Junior), Supt., Elev. Supply & Repair Co., 561 Monroe St.
- Schlacks, W. J., McCord & Co., Peoples Gas Bldg.
- Sessions, Edson O., Member of Firm, Woodmansee, Davidson & Sessions, 1048 First Natl. Bank Bldg.

ILLINOIS, Chicago (Continued).

- Seymour, Dudley S., Supt., Union Spec. Mch. Co., 300 W. Kinzie St.
- Shankland, E. C., Civ. Engr., E. C. & R. M. Shankland, 1106 Rookery Bldg.
- Sherman, Mason H., Mgr., By-Products Coke Corp., 1121 Marquette Bldg.
- Sherwood, Mather W., Asst. Mgr. Min. Dept., Chicago Pneu. Tool Co., 1010 Fisher Bldg.
- Sorge, Adolph, Jr., Mech. Engr., 1537-1539 Monadnock Blk.; also, St. Joseph, Mich.
- Southworth, Martin O., Elec. Engr., Fairbanks, Morse & Co., 900 S. Wabash Ave.
- Sprau, William C. (Junior), Mech. Engr., Harbor and Subway Com., City of Chicago, City Hall Sq. Bldg.
- Spurling, O. C., West. Elec. Co., Hawthorne Sta.
- Steele, Walter D., V. P., Benjamin Elec. Mfg. Co., 120-128 S. Sangamon St.
- Stevens, Burt Dwight, Mech. Engr. Charge Designing Dept. and Pat. Matters, Miehle Ptg. Press & Mfg. Co., 14th and Robey Sts.
- Streeter, Lafayette P., Air Brake Engr., Ill. Central R. R.
- Swartwout, Everett W. (Junior), Mgr. Chicago Office, Nordberg Mfg. Co., 1504 Fisher Bldg.
- Sweeney, John M., Mech. Engr., 1636 Monadnock Bldg.
- Symonds, Nathaniel Gardiner (Junior), Sales Mgr. Chicago Dist., The Westinghouse Mch. Co., 1406 N. Y. Life Bldg.
- Symons, Wilson E., Cons. Engr., 900 Postal Tel. Bldg.
- Taylor, J. Hall, Secy. and Genl. Mgr., Am. Spiral Pipe Wks.
- Thayer, Robert Ellis (Junior), Assoc. Mech. Editor, Railway Age Gazette and American Engineer, Transportation Bldg.
- Thorp, George G., Second V. P., Ill. Steel Co., and V. P. Ind. Steel Co., Commer. Natl. Bank Bldg.
- Throckmorton, George Kenneth (Junior), Mgr. Dept. of Engrg. and Drafting, Sears, Roebuck & Co.
- Traver, Wilber H., Mgr. Min. and Contract Dept., Chicago Pneu. Tool Co., 1010 Fisher Bldg.
- Troutman, Howard Ellsworth, Asst. Sales Mgr., Internatl. Steam Pump Co., 770 Old Colony Bldg.
- Unger, John S., Cons. Engr., 3344 Evanston Ave.
- Van Valkenburgh, R. D., Branch Mgr., Colonial Steel Co., 213 W. Lake St.
- Van Zandt, Paul C., Mech. Engr., Allis-Chalmers Co., 2025 Peoples Gas Bldg.
- Veness, Alfred E., Supt., The Internatl. Register Co., 625 W. Jackson Blvd.
- Wait, Henry Heileman, Pres., Rateau Turbine Co., 215 Wabash Ave.
- Walte, Edward B., Head Instr. Dept., Am. Sch. of Corr., 58th St. and Drexel Ave.
- Wallace, David A., Mech. Engr., West. Elec. Co., Hawthorne Sta.
- Wells, Frederick Latimer, 101 S. Clinton St.
- Widdicombe, R. A., Engr., 5552 Lakewood Ave.
- Wilson, Charles E., Chicago Sales Mgr., Internatl. Steam Pump Co.

ILLINOIS, Chicago (Continued).

- Winger, Stanley D. (Junior), Sales Engr., Green Engrg. Co., 28 E. Jackson St.
- Wisner, George M., Ch. Engr., Sanitary Dist. of Chicago, 1500 Am. Trust Bldg.
- Woodman, George A., Mech. Engr., Kirby Equip. Co., Peoples Gas Bldg.
- Woodmansee, Fay, Cons. Engr., Woodmansee, Davidson & Sessions, 1048 First Natl. Bank Bldg.
- Woods, Mercer Hugh (Junior), Tool Draftsman, Automatic Elec. Co.; also, Aylmer, Ont., Canada.
- Yeomans, Lucien I., Industrial Engr., Commer. Natl. Bank Bldg.
- Zapp, Louis M. (Junior), A. L. Drum & Co., 624 Am. Trust Bldg.
- Chicago Heights.**—Alger, Harley C. (Junior), Mgr. Weigher Dept., The Kennicott Co.
- Jones, Harold C. (Junior), Asst. to V. P., Inland Steel Co.
- Wile, Julius I., Chalmers & Williams.
- Decatur.**—Cash, Arthur Wise, Charge Regulating Valve and Engrg. Dept., H. Mueller Mfg. Co.
- Chamberlain, George E., Cons. Engr.; Genl. Supt., A. E. Staley Mfg. Co.
- East Alton.**—Olin, F. W., Pres., Equitable Powder Mfg. Co., West. Cartridge Co., West. Powder Mfg. Co., and Pres., Egyptian Powder Co.
- East Moline.**—Brown, Theophilus, Genl. Supt., Marseilles Co.
- Soverhill, Harvey A., V. P. and Genl. Supt., Root & Van Dervoort Engrg. Co., and V. P., Moline Auto Co.
- East St. Louis.**—Purinton, Arthur James, care of East St. Louis & Suburban Ry. Co.
- Elgin.**—Gabriel, Wm. A., Ch. Draftsman and Designer, Elgin Natl. Watch Co.
- Hunter, Geo. E., Genl. Supt., Elgin Natl. Watch Co.
- Malvern, Lewis K., Mech. Engr., Elgin Natl. Watch Co.
- Price, Albert M., Cons. Mech. Engr., 56 River St.
- Evanston.**—Philbrick, Herbert Shaw (Junior), Prof. Mech. Engrg., Northwestern Univ.
- Harvey.**—Brandon, Geo. Russel, V. P. and Genl. Engr., Whiting Fdy. Equip. Co.
- Jenkins, M. L., Genl. Supt., Buda Co.
- McDougall, Andrew Horace, Ch. Engr., Whiting Fdy. Equip. Co.
- Hawthorne.**—Harper, John, Ch. Draftsman, West. Elec. Co., 48th Ave. and 24th St.
- Peterson, Franklin C., In Charge Engrs. and Draftsmen, West. Elec. Co.
- Spencer, Frank C., West. Elec. Co.
- Joliet.**—Case, Milo McClelland (Junior), Mech. Engr., 163 Illinois St.
- Jonas, Milton Rudolph (Junior), Steam Expt., Ill. Steel Co.
- Meaker, Guy Larnard (Junior), Am. Steel & Wire Co., Rockdale Wks.
- Sampson, Chas. C., Mech. Engr., Gas Engr., Ill. Steel Co., Joliet Wks.
- Hankakee.**—Riggs, John D. (Junior), Designer, D. Bradley Wks., Sears, Roebuck & Co.

ILLINOIS (Continued).

Kewanee.—Bannister, John C., Mgr., Kewanee Wks., Natl. Tube Co.

Cobb, Charles Carroll, Jr. (Junior), Draftsman, Natl. Tube Co.

McCarthy, Harry, Ch. Draftsman, Natl. Tube Co.

Newlin, Alexander Z., Mech. Engr., Natl. Tube Co., Kewanee Wks.

Quirke, Edward D., Designer and Checker, Natl. Tube Co.

La Salle.—Neureuther, Andrew Henry (Junior), Mech. Engr., West. Clock Co.

Thomas, Edward G., Mech. Engr., The Boss Mfg. Co.

Mattoon.—Clayton, J. Paul (Junior), Mgr. Commercial Dept., Central Ill. Pub. Service Co.

Moline.—Dunkin, William Van, Ch. Draftsman, Deere & Co.

Evans, William Francis, Mech. and Production Engr., Deere & Co.

Mixter, George W., V. P., Deere & Co.

Oakland.—Pemberton, Carlisle (Junior), Repair Wk. in Auto Garage, Pemberton & Lyons.

Oglesby.—Fraser, D. Ross (Junior), Chicago Portland Cement Co.

Peoria.—Brandon, William J., Mech. Engr., Avery Co.

Harman, John J., Mech. Engr., Harman Engrg. Co., 120 Fredonia Ave.

Hoppin, Charles Albert, Genl. Supt. Elec. and Heating Depts., Peoria Gas & Elec. Co.

Norelius, E. F. (Junior), Mech. Engr., Holt Caterpillar Co., Inc.

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Rockford.—Barnes, W. F., 813 N. Main St.

Colman, Howard D., Member of Firm, Barber-Colman Co.

Richards, William A. (Junior), Dir. of Vocational Education, City of Rockford, High Sch. Bldg.

Silvis.—Boyd, Wm. Wallace (Junior), Draftsman, Rock Island Lines, M. P. Dept.

South Chicago.—Bacon, Charles James, Steam Engr., Ill. Steel Co.

Newton, Peter Augustin, Asst. Genl. Supt., Ill. Steel Co., South Wks.

Urbana.—Benedict, Bruce Willet, Dir. Shop Laboratories, Dept. Mech. Engrg., Univ. of Ill.

Brooks, Morgan, Prof. Elec. Engrg., Univ. of Ill.

Dent, John Adlum (Junior), Instr. Mech. Engrg., Univ. of Ill.

Goss, W. F. M., Dean College of Engrg., and Dir. Engrg. Exper. Sta., Univ. of Ill.

Leutwiler, Oscar A., Asst. Prof. Mch. Design, Univ. of Ill.

Marquis, Franklin Wales (Junior), Assoc. in Ry. Engrg., Engrg. Exper. Sta., Univ. of Ill.

ILLINOIS, Urbana (Continued).

Mosher, William Earl (Junior), Research Fellow in Mech. Engrg., Engrg. Exper. Sta., Univ. of Ill.

Richards, Chas. Russ, Prof. Mech. Engrg., Charge of Dept., Univ. of Ill.

Schmidt, Edward C., Prof. Ry. Engrg., Univ. of Ill.

Snodgrass, John McB. (Junior), Asst. Prof. Ry. Engrg., Univ. of Ill.

Waukegan.—Ekstrand, L. M., Engr., Chicago Dist., Am. Steel & Wire Co.

Winnetka.—Herdman, Frank E., Mgr. and Engr., Water and Light Properties.

INDIANA

Brazil.—Crawford, C. W., Supt., Crawford & McCrimmon Co.

Connersville.—Wilkin, John T., V. P. and Mech. Engr., Connersville Blower Co.

East Chicago.—Graver, Alexander M. (Junior), Mech. Engr., Wm. Graver Tank Wks.; also, Chicago, Ill.

Evansville.—Harrington, Norman T., Wks. Mgr., Bucyrus Steam Shovel Co.

Fort Wayne.—Astrom, John, Mech. Engr., 611 W. Wayne St.

Barrett, Walter A. (Junior), Sales Engr., The Bass Fdy. & Mch. Co.

Cressler, Alfred David, Pres. and Cons. Engr., Kerr Murray Mfg. Co., 1613 S. Calhoun St.

Cressler, George Halloway (Junior), Engr., Kerr Murray Mfg. Co.

Cressler, Kerr Murray (Junior), Secy. and Engr., Kerr Murray Mfg. Co.

Feagles, Ralph L., Deister Mch. Co., Schoaff Bldg.

Guldin, Olaf N., Pres. and Genl. Mgr., The West. Gas Constr. Co.

Muir, John J., Mech. Supt., Bass Fdy. & Mch. Co.

Stone, Thos. W. (Junior), Engr., West. Gas Constr. Co.

Gary.—Houghton, Clyde Arthur (Junior), Asst. Elec. Engr., Ill. Steel Co.

McArthur, Arthur Royal, Res. Engr., Am. Sheet & Tin Plate Co.

Indiana Harbor.—Hvid, Marinus (Junior), Ch. Draftsman, Inland Steel Co.

Lees, John Walter, Genl. Supt., Inland Steel Co.

Indianapolis.—Ballentine, William Irwin, Supt., Link-Belt Co.

Bartlett, George M., Mech. Engr., Diamond Chain & Mfg. Co.

Bixby, Allan Smith, Supt., Natl. Malleable Castings Co.

De Haven, Irvin C. (Junior), Dist. Mgr., A. Sorge, Jr., Co., 525 State Life Bldg.

Hamerstadt, William D. (Junior), Engr., The Rockwood Mfg. Co.

Hurd, Charles Henry, Cons. Hyd. and Sanitary Engr., 113 Monument Pl.

Johnson, Louis L., Cons. Engr., 428 Law Bldg.

Kennedy, Harold H. (Junior), Ch. Engr., The Waverley Co.

Libby, Charles Leon, V. P. and Supt., Internatl. Mch. Tool Co.

McMeans, O. E. (Junior), Cons. Engr., 710 Majestic Bldg.

Millholland, William Knox, Pres., W. K. Millholland Mch. Co., Industrial Bldg., 10th and Canal Sts.

INDIANA, Indianapolis (Continued).

- Rockwood, George O., Pres., The Rockwood Mfg. Co., P. O. Box 636.
- Sargent, Chas. E., Mech. Engr., 2226 N. Meridian St.
- Schwartz, Harry Adolph (Junior), Asst. Supt., The Natl. Malleable Castings Co.
- Taylor, Wm. M., Pres., Chandler & Taylor Co., S. Addison St.
- Todd, Robert I., Pres. and Genl. Mgr., Indianapolis Traction & Terminal Co.
- Wainwright, Lucius M., Pres., Diamond Chain & Mfg. Co., 241 W. Georgia St.
- Wall, William Guy, V. P. and Ch. Engr., Natl. Motor Vehicle Co.
- Warrington, Jesse, 271 N. Randolph St.
- Weinshank, Theodore, Mgr., Warren Webster & Co., 821 Hume Mansur Bldg.
- West, Walter Carr (Junior), Mech. Expt., Galena-Signal Oil Co., 410 Traction Bldg.
- White, Herbert J., Production Engr., Link-Belt Co.
- La Porte.**—Crook, Geo. Louis, Mgr. New Installations and New Factories, M. Rumely Co.
- Rice, Geo. W., Supvr. of Inspec., M. Rumely Co.
- Walton, Albert, Shop Systematizer and Expt. Mfg. Accountant, M. Rumely Co.
- Lafayette.**—Bauer, Thomas, Pres. and Genl. Mgr., Lafayette Box Board & Paper Co.
- Benjamin, Chas. Henry, Dean Schs. of Engrg., Purdue Univ.
- Cole, Arthur W., Assoc. Prof. Mech. Engrg., Purdue Univ.
- Dickerson, H. S., Instr. Exper. Engrg., Purdue Univ.
- Golden, M. J., Prof. Practical Mechanics, Purdue Univ.
- Jamison, Alpha Pierce (Junior), Prof. Mech. Drawing, Purdue Univ.
- King, Geo. Caryl, Asst. in Mch. Design, Purdue Univ.
- Ludy, Llewellyn V., Prof. Exper. Engrg., Purdue Univ.
- Munro, George Wesley, Asst. Prof. Mech. Engrg., Purdue Univ.
- Turner, William Payson, Prof. Practical Mechanics, Purdue Univ.
- Veal, C. B., Prof. Mch. Design, Purdue Univ.
- Young, Gilbert A., Head of Dept. of Mech. Engrg., Purdue Univ.
- Mishawaka.**—Ahara, Edwin Hugh, Genl. Supt., Dodge Mfg. Co.
- Guise, Hiram Barnes, Ch. Engr., Rubber Regenerating Co.
- Knorr, Karl W., Member Engrg. Staff, Dodge Mfg. Co.
- Mix, Melville W., Pres. and Mgr., Dodge Mfg. Co.
- Roe, Walter E., Ch. Draftsman, Dodge Mfg. Co.
- Muncie.**—Johnson, Abbott Livingstone, Pres., Warner Gear Co.
- South Bend.**—Hansen, T. H. C., Supt., Wire Spec. & Mch. Wks., 1108 High St.
- Johnson, Harry Dlbrow, Jr. (Junior), Ch. Engr., Studebaker Corp.
- Munson, Stanley (Junior), Engr. of Wks., Oliver Chilled Plow Wks.
- Rickey, Walter J., Wks. Mgr., The Singer Mfg. Co.
- Terre Haute.**—Peddle, John B., Prof. Mch. Design, Rose Poly. Inst.
- Wagner, Frank C., Prof. Mech. and Elec. Engrg., Rose Poly. Inst.

INDIANA, Terre Haute (Continued).

Williams, Alan Gillespie (Junior), Eng. House Foreman, Vandalia R. R.

Wadena.—Pape, James Otto (Junior), Mgr., Wadena Grain Co., W. F. Starz & Co.

IOWA

Ames.—Davidson, J. Brownlee, Prof. Agri. Engrg., Ia. State College.

Major, C. C., Assoc. Prof. Mech. Engrg., Engrg. Hall, Ia. State College.

Charles City.—Willson, Ernest M., Ch. Draftsman, Hart-Parr Co.

Davenport.—Burleigh, William Henry (Junior), Mch. Foreman, Davenport Loco. Wks.

Hayward, Elmer L., Pres., Freeo Valley Ry., Asst. to Pres.

Hayward, also Eagle Lumber Cos., First Natl. Bank Bldg.

Iowa City.—Wilbur, Ralph Sydney (Junior), Instr. Mech. Engrg., College of Applied Science, Univ. of Ia.

Woodward, Sherman Melville, Prof. Mechanics, State Univ. of Ia.

Keokuk.—Goodenough, Walter, Mgr. Keokuk Div., Stone & Webster Engrg. Corp.

Parsons, Burt Hewitt, Mech. Engr., Mississippi River Power Co.

Wilson, Archibald H., Ch. Draftsman, Stone & Webster Engrg. Corp.; also, Lawrence, Mass.

Marshalltown.—Hook, James William (Junior), Sales Mgr., C. A. Dunham Co.

Ingalls, Frederick D. B., Engr., C. A. Dunham Co.

Mason City.—Bailey, Elton D., Supt. Power and Equip., Northwestern States Portland Cement Co.

Ottumwa.—English, Harry K., Secy. and Ch. Engr., Ottumwa Iron Wks.

Waterloo.—Cummings, Edgar C., Associated Mfrs. Co.

KANSAS

Hutchinson.—Rutherford, G. S., Genl. Mgr., Kan. Chem. Mfg. Co.

Independence.—Coburn, R. G. (Junior), Ch. Engr., Kasigan Oil, Gas & Power Co.

Davis, Herbert R. (Junior), Supt. Field Dept., Kan. Natural Gas Co.

Posgate, James Stephen, Supt. of Compressor Stas., Kan. Natural Gas Co.

Iola.—Swiggett, Clayton Andrew (Junior), Draftsman and Designer, The Iola Portland Cement Co.

Lawrence.—Sibley, Frederick H., Mech. Engrg., Univ. of Kan.

Walker, Perley F., Prof. Mech. Engrg., Univ. of Kan.

Manhattan.—Bowerman, Myron Ralph (Junior), Asst. in Mech. Drawing and Mch. Design, Kan. State Agri. College.

Potter, Andrey A., Prof. Steam and Gas Engrg., in Charge Mech. Engrg. Course, Kan. State Agri. College.

Parsons.—Maddocks, Wm. H., Asst. Supt. Mchy. and Equip., M. K. & T. Ry.

Topeka.—Brooks, Henry K., Pres., Capital Iron Wks.

Whiteford, James F., Bonus Supvr., Santa Fé R. R. Shops, Santa Fé Motive Power Bldg.

KENTUCKY

- Ashland.**—von Bayer, August H., Supt., Ky. Solvay Coke Co.
Lexington.—Anderson, Frederick Paul, Prof. Mech. Engrg. and Dir. College of Mech. and Elec. Engrg., State Univ. of Ky., Box 294.
Louisville.—Herb, Arthur (Junior), Mech. Engr., J. Schwarzwaldner & Sons, 18th and Magnolia Sts.
 Leisen, Theodore Alfred, Ch. Engr. and Supt., Louisville Water Co., 435 Third St.
 Speed, William S., Pres., Louisville Cement Co., 325 W. Main St.

LOUISIANA

- Baton Rouge.**—Kerr, Eugene W., Prof. Mech. Engrg., La. State Univ.
Boyce.—Anderson, Robt. Marshall.
Cinclare.—Whipple, William (Junior), Supt. Cinclare Central Factory.
Lake Charles.—Chalkley, Henry G., Mgr. and Engr., North Am. Land & Timber Co.
Morgan City.—Pharr, Eugene A., Sugar Planter and Mfr.
New Orleans.—Beck, James Doughty, Supt. Constr., Shakespeare Iron Wks., 913 Girod St.
 Borde, George U., Cons. Engr., 820-822 Hibernia Bldg.
 Burwell, Robert Turnbull, Ch. Insp. Gulf Dept., Hartford Steam Boiler Inspc. & Ins. Co., 833 Gravier St.
 Castanedo, Walter, Dist. Mgr., Power Plant Equip., 1103 Hennan Bldg.
 Gregory, William B., Prof. Exper. Engrg., Tulane Univ., and Irrigation Engr., U. S. Dept. of Agri., 630 Pine St.
 Hutson, Henry L., Ch. Engr. and Sales Mgr., A. M. Lockett & Co., Ltd., 533 Baronne St.
 Ivens, Edmund M. (Junior), Asst. Mgr., Skinner Eng. Co., 1018 Hibernia Bank Bldg.
 Jahncke, Ernest Lee, Pres., The Jahncke Navigation Co., 814 Howard Ave.
 Johnson, Warren, Cons. Engr., 122 Carondelet St.
 Lockett, Andrew Moore, Pres., A. M. Lockett & Co., Ltd., 533 Baronne St.
 McKinney, Edward Byron, Sr., Supt. of Power, New Orleans Ry. & Light Co., 205 Baronne St.
 McMillan, Chas. M. (Junior), Engrg. Dept., The Jahncke Navigation Co., 814 Howard Ave.
 Malochee, Henry J., Mech. Engr., 802 Perrin Bldg.
 Murphy, John H., Mfr. and Contr., John J. Murphy Iron Wks.
 Nelson, Bernard Stanley (Junior), A. M. Lockett & Co., 533 Baronne St.
 Porter, Hollis P., Engr. of Constr., A. M. Lockett & Co.; also, Topeka, Kan.
 Raymond, Alfred, Genl. Mgr., Drainage, 503 City Hall Annex.
 Rugan, Henry Fisler, Assoc. Prof. Mech. Arts, Tulane Univ.
 Sammons, E. A., Pres. and Treas., E. A. Sammons Co., Ltd., 303-307 Magazine St.
 Snypp, Charles Edward, Dist. Engr., The So. Cotton Oil Co.
 Von Phul, Gilbert D., Contr. Mech. Engr., Sugar and Genl. Mchy., 322 Hibernia Bank Bldg.

LOUISIAN, New Orleans (Continued).

von Phul, William, Member of Firm, Ford, Bacon & Davis,
921 Canal St.

Westerfield, George Sumner (Junior), Mgr. and Dist. Mgr.,
Hooven, Owens, Rentschler Co., Warren Webster & Co., 326-
329 Hennen Bldg.; also, Houston, Tex.

Olivier.—Pharr, Henry Newton, Sugar Planter and Mfr., Iberia
Parish.

MAINE

Bangor.—Humphrey, Orman B., Cons. Engr., 96½ Exchange St.
Penney, Rodney Clapp, Mech. Engr., Dodge Mfg. Co.
Rowe, George F., Mech. Engr.

Bath.—Andrews, Jacob R., Pres., Hyde Windlass Co.
Hyde, John Sedgwick, Pres. and Genl. Mgr., Bath Iron Wks.

Biddeford.—McArthur, Robt., 34 Jefferson St.

Brunswick.—Eaton, Russell Wm., Agt., Cabot Mfg. Co.

Cumberland Mills.—Schumaker, John Stauble, Ch. Engr. and
Mech. Supt., S. D. Warren & Co.

Warren, John E., Agt., Pulp and Paper Mills, Westbrook.

Lewiston.—Bates, Daniel Moore, Agt., Lewiston Bleachery & Dye
Wks.

Fisher, Lieut. Joseph Otto (Junior), U. S. Navy, U. S. S.
North Dakota, 500 Main St.

North Lovell, Oxford Co.—Garcelon, Charles A., Jr. (Junior).

Orono.—Herschel, Winslow Hobart, Assoc. Prof. Mech. Engrg.,
Univ. of Me.

Jewett, Arthur C., Prof. Mech. Engrg., Univ. of Me.

Palmer, Perley Burnham, Genl. Supt., Orono Pulp & Paper Co.
of Bangor.

Portland.—Hammett, Philip Melancthon, Supt. M. P., Me. Central
R. R. Co.

Scarborough.—Jordan, Samuel S., Naval Arch. and Engr.

Waterville.—Marr, Geo. H., Mech. Engr., Hollingsworth & Whit-
ney Co.

Philbrick, Frank B., 20 College Ave.

MARYLAND

Annapolis.—Cole, Winthrop, Mech. Engr., Engrg. Exper. Sta.,
U. S. Naval Academy.

Danforth, Raymond Hewes, Engr. Asst., Sch. Marine Engrg.,
U. S. Naval Acad.

De Baufre, Wm. L. (Junior), Mech. Engr., U. S. Naval Engrg.
Exper. Sta.

Johnson, Theodore Woolsey, Prof. Mech. Drawing, U. S. Naval
Academy.

Loeb, Leo (Junior), Mech. Engr., Naval Engrg. Exper. Sta.

Baltimore.—Adams, Henry, Cons. Engr., 855-859 Calvert Bldg.

Basshor, Chas. Hazeltine, V. P. and Genl. Mgr., Thomas C.
Basshor Co., 28 Light St.

Beadenkopf, George, Ch. Engr. Gas Div., Consld. Gas, Elec.
Light & Power Co. of Baltimore, Lexington and Liberty Sts.

Chatard, Wm. M., Member of Firm, Chatard & Norris, Contr.
Engrs., 1415 Continental Trust Bldg.

Clark, Frank Henry, Genl. Supt. M. P., B. & O. R. R.

MARYLAND, Baltimore (Continued).

- Cottman, Lewis Warrington, Supt. and Ch. Engr., The Palmetto Phosphate Co., Keyser Bldg.
- Detrick, Jacob S., Pres., Detrick & Harvey Mch. Co., 508 E. Preston St.
- Ford, John D., Rear Admiral, U. S. N., 2319 Maryland Ave.
- Keilholtz, Pierre Otis, Cons. Engr., Continental Bldg.
- Lewis, Joseph E. (Junior), Cons. Engr., 1601 Moreland Ave.
- MacLauchlan, James H., J. H. MacLauchlan Engrg. Co., 205 W. Lombard St.
- Meade, Richard Kidder, Chem. Engr., Cons. Practice, 202 N. Calvert St.
- Middleton, Harvey, Pres., Thos. C. Basshor Co., 28 Light St.
- Mirkil, Thomas H., Jr., V. P. and Genl. Mgr., Poole Engrg. & Mch. Co., Woodberry.
- Neidhardt, J. Wm., Ch. Engr., Detrick & Harvey Mch. Co.
- Passano, Edward Boteler, Pres. and Mgr., The Williams & Wilkins Co., 2427 Greenmount Ave.
- Peirce, Wm. Henry, V. P. and Genl. Mgr., Baltimore Copper Smelting & Rolling Co.
- Pennington, James H., Supt. Constr. and Power, Am. Smelting & Refining Co.
- Polk, Anderson, Assoc. with The Lowe Bros. Co. of Dayton, O., Paint Makers, 608 Continental Bldg.; also, New York, N. Y.
- Posey, James (Junior), Cons. Engr., 328 N. Charles St.
- Price, Henry M., Mech. Engr., Office of Supv. Arch., Treasury Dept.
- Reeder, Charles L., Cons. Engr., 917-921 Equitable Bldg.
- Schmidt, Charles R.**, 200 E. 24th St.
- Scott, James B., Cons. Engr., 800 Continental Trust Bldg.
- Shoudy, Wm. Allen (Junior), Baltimore Copper Smelting & Rolling Co.
- Sickles, Eugene Chas., Supt. Power Plants, B. & O. R. R., Central Bldg.
- Varney, Wm. Wesley, Mech. Engr., and Atty-at-Law, 1221 Calvert Bldg., St. Paul and Fayette Sts.
- Wilson, William L. (Junior), V. P., The Elec. Installation Co., 411 N. Charles St.
- Cumberland.**—Muncaster, Walter J., V. P. and Genl. Mgr., Cumberland Steel Co.
- Hagerstown.**—Hull, Foster John, 102 Broadway.
- Security.**—Sinclair, A. F., Genl. Mgr., Security Cement & Lime Co.
- Sparrows Point.**—Lane, Harry Clay, Ch. Draftsman, Md. Steel Co.
- Martin, Simon Strock, Supt., Md. Steel Co., P. O. Box 87.
- Union Bridge.**—Griffiths, Leonard L., Mgr., Tidewater Portland Cement Co.

MASSACHUSETTS

- Acton.**—Crooker, Ralph.
- Adams.**—Baker, Charles H. (Junior), Ch. Engr. Tunnel Power Sta., Berkshire St. R. R.
- Plunkett, Charles T., V. P. and Secy., Berkshire Cotton Mfg. Co.
- Allerton.**—Rivett, Edward.

MASSACHUSETTS (Continued).

- Arlington.**—Schwamb, Peter, Treas., Theodore Schwamb Co., 1171 Massachusetts Ave.
- Athol.**—McGregor, John A., Pres., Union Twist Drill Co.
Simpson, Robert James Osborne, Supt. and Mech. Engr., L. S. Starrett Co.
- Attleboro.**—Mossberg, Frank, Pres. and Genl. Mgr., Frank Mossberg Co., also V. P., Cons. Engr., Stand. Mech. Co. of Providence, R. I.
Tuttle, Walter Irving (Junior), Secy., Treas. and Asst. Genl. Mgr., Frank Mossberg Co.
- Beverly.**—Ball, Walter Seaver, United Shoe Mchy. Co.
Farrell, Harry C., Mech. Engr., United Shoe Mchy. Co.
Hadaway, John Benjamin, Charge Exper. Dept., United Shoe Mchy. Co.
Kaven, Moses B., Supt., United Shoe Mchy. Co.
- Boston.**—Adams, Kilburn E. (Junior), Mech. Engr., Boston & Albany R. R., Rm. 370, South Sta.
Alden, Frederick Arthur (Junior), Asst. Mech. Supt., Wm. Filene's Sons Co., Washington, Summer and Hawley Sts.
Aldrich, Chester S. (Junior), Treas., Gray-Aldrich Co., Inc., 33 Commercial Wharf.
Andersen, Johan Marinius, Pres., Albert & J. M. Anderson Mfg. Co., 289 A St.
Andrew, James D., Boston Elev. Ry. Co., 439 Albany St.
Ashton, Albert Carter, Treas., Ashton Valve Co., 271 Franklin St.
Bailey, Ervin G., Mech. Engr. and Partner, Fuel Testing Co., 220 Devonshire St.
Baker, Charles F., Cons. Engr., 84 State St.
Bancroft, Charles Foster, V. P., Manchester Elec. Co., Elec. Engr., Mass. Elec. Cos., Supt. M. P. and Mchy., Bay State St. Ry. Co., 84 State St.
Barker, Perry (Junior), Fuel Engr., Arthur D. Little, Inc., 93 Broad St.
Barrus, Geo. H., Expt. and Cons. Steam Engr., 301 Pemberton Bldg., 12-20 Pemberton Sq.
Bartlett, Charles H., Constr. Engr., Stone & Webster Engrg. Corp.
Bartlett, Henry, Genl. Mech. Supt., Boston & Me. R. R., North Sta.
Bates, Edward Carrington, 122 Marlboro St.
Behrend, Bernard A., Cons. Engr., 566 John Hancock Bldg., 200 Devonshire St.
Bellows, Lewis Edward, 24 Milk St.
Bolgiano, J. Ralph (Junior), N. E. Sales Mgr., Taylor-Wharton Iron & Steel Co., Rm. 709, 8 Irvington St.
Bowers, George Wright, Mech. and Cons. Engr., 53 Devonshire St.
Braman, Samuel N. (Junior), 33 Pearl St.
Brown, Harry Sanford (Junior), N. E. Sales Mgr., Power Spec. Co., 50 Congress St.
Brown, Harry W. (Junior), Asst. Engr., Am. Agri. Chem. Co., 92 State St.
Bump, Archie Edmund, Mgr. Constr. Dept., Swift & Co., 34 N. Market St.

MASSACHUSETTS, Boston (Continued).

- Burleigh, Chas. B., Dist. Mgr. Ltg. Dept., Genl. Elec. Co., 84 State St.
- Burnham, Harry A., Engr. and Spec. Inspr., Factory Mutual Fire Ins. Cos., 31 Milk St.
- Bushnell, Fred. N., V. P. and Engrg. Mgr., Stone & Webster Engrg. Corp., 147 Milk St.
- Cargill, Walter Neal, Engr., Stone & Webster Engrg. Corp., 147 Milk St.
- Carhart, Alfred B., Supt., Crosby Steam Gage & Valve Co.
- Chamberlain, A. B., Engr. Steam Div., Sta. Engrg. Dept., Edison Elec. Ill. Co., 39 Boylston St.
- Chandler, Clarence Austin, Mech. Engr., 609-610 Penn Mutual Bldg., 24 Milk St.
- Chapman, David Albert (Junior), Mech. Supt., Wm. Filene's Sons Co., Washington, Summer and Hawley Sts.
- Cheney, Nathan, Engr., Stone & Webster Engrg. Corp., 147 Milk St.
- Choate, William E., Genl. Mgr., Carr Fastener Co., 145 High St.
- Church, Wm. Lee, Pres. and Cons. Engr., Ambursen Hyd. Constr. Co., 88 Pearl St.; also, New York, N. Y.
- Churchill, Charles O., Salesman, Lackawanna Steel Co., 40 Central St.
- Clancy, Geo. W., Pres., Globe Chem. Co., 68 Devonshire St.; also, Albany, N. Y.
- Clark, Edward Lord, Mgr. Boston Office, Westinghouse Mch. Co., 201 Devonshire St.
- Clark, Frank S., Engr., Stone & Webster Engrg. Corp., 147 Milk St.
- Clarke, Alfred, Pres., Gas & Elec. Corps., 77 Franklin St.; also, Walpole, N. H.
- Clarke, Charles Warrington E., Mech. Engr., Stone & Webster Engrg. Corp., 147 Milk St.
- Coburn, Howard L., Secy. and Ch. Engr., Ambursen Hyd. Constr. Co., 88 Pearl St.
- Cole, Fred Baker, Prin. Asst. Engr., Chas. T. Main, 201 Devonshire St.
- Collins, B. R. T., Cons. Mech. Engr. and Power Plant Economist, 201 Devonshire St.
- Croghan, John T., Constr. Supt., Stone & Webster Engrg. Corp., 147 Milk St.; also, Youngstown, O.
- Crosby, William Wyman, Member of Firm, F. W. Dean, Inc., Engrs., Rm. 1112, 53 State St.
- Curtis, Ralph E., Edison Elec. Ill. Co. of Boston, 39 Boylston St.
- Cutler, Arthur E., Mech. Engr., Ashton Valve Co., 271 Franklin St.
- Daggett, Herbert Chapin, Mgr. N. E. Branch Office, S. Morgan Smith Co., 176 Federal St.
- Dawes, Herbert N., V. P., Nightingale & Childs Co., Pres., Cerro Gordo Fruit Co., V. P., Putnam-Morrill Co., 205 Congress St.
- Dean, Francis W., Mill Engr. and Arch., Exch. Bldg., 53 State St.
- Densmore, Edward D., Engr. and Arch., Densmore & LeClear, 88 Broad St.
- DeWolf, John O., Mech. and Mill Engr., 19 Milk St.

MASSACHUSETTS, Boston (Continued).

- Dillon, Robert Emmet (Junior), Head of Steam Div. Standardizing and Testing Dept., Edison Elec. Ill. Co. of Boston, 39 Boylston St.
- Dow, Benjamin Warren (Junior), Asst. Engr. Constr. Wk., Stone & Webster Engrg. Corp., 147 Milk St.
- Dowst, F. B., West Roxbury.
- Duncan, Albert Greene, Treas., Chicopee Mfg. Co., Treas., Harmony Mills.
- Dunn, Charles, 17 Ivy St.
- Durfee, Walter C. (Junior), Mfg. and Cons. Chem., 516 Atlantic Ave.
- Dusossoit, Octave, Res. Agt., Hohmann & Maurer Mfg. Co.
- Edgar, Charles Leavitt, Pres. and Genl. Mgr., Edison Elec. Ill. Co. of Boston, 70 State St.
- English, William T., Pres., Walworth-English-Flett Co., 100 Pearl St.
- Fallon, John B. (Junior), Treas., Stickney & Poor Spice Co., 184 State St.
- Farrar, Chas. O., Supt. Constr., Otis Elev. Co., 34 India St.
- Fish, Charles H., 85 Devonshire St.
- Fisher, Henry Donald (Junior), Fuel Testing Co., 220 Devonshire St.
- Flather, Frederick A., Treas., Boott Mills, 79 Milk St.
- Foley, Leonard H. (Junior), Foreman Drafting Room Sta. Engrg. Dept., Edison Elec. Ill. Co. of Boston.
- Ford, William Lucas, N. E. Sales Mgr., Murphy Iron Wks. of Detroit, Mich., Rm. 520, 35 Federal St.
- French, Edward Vinton, V. P. and Engr., Arkwright Mut. Fire Ins. Co., 31 Milk St.
- Frothingham, Francis Edward, Engr., Perry, Coffin & Burr, 60 State St.
- Fuller, Charles Edward, Prof. Theoretical and Applied Mechanics, Mass. Inst. of Tech.
- Fulton, Arthur Oram (Junior), Sales Engr., Wheelock, Lovejoy & Co.
- Galloupe, Francis E., Mech. Engr., 335 Old South Bldg.
- Gay, Harry, Ch. Draftsman, Stone & Webster Engrg. Corp., 147 Milk St.
- Gerrish, William H., Ch. Smoke Insp., Bd. of Gas and Elec. Light Commrs., Commonwealth of Mass., 603 Ford Bldg., 15 Ashburton Pl.
- Gleason, Gilbert Howe, Dodge Mfg. Co., 137 Purchase St.
- Gooding, Chas. S., Mech. Engr. and Solicitor Patents, 28 School St.
- Greene, Levi R., Cons. Engr., Walworth Mfg. Co., 132 Federal St.
- Guillo, Harry Prescott, Mech. Supt., The Forbes Lithograph Mfg. Co.
- Hale, Robt. Sever, Edison Elec. Ill. Co., 39 Boylston St.
- Hall, Robert E., V. P. and Treas., The Goulds Mfg. Co. of N. E., 58 Pearl St.
- Hart, Robert W., N. E. Mgr., Seager Eng. Wks., 65 Beverly St.
- Hartwell, Hiram B. (Junior), Ch. Draftsman, Crosby Steam Gage & Valve Co.

MASSACHUSETTS, Boston (Continued).

- Haven, George Bartholomew, Assoc. Prof. Mech. Engrg., Mass. Inst. of Tech.
- Haven, Harry M., Member of Firm, F. W. Dean, Inc., 53 State St.
- Hayes, Frank H., N. E. Mgr., The Platt Iron Wks. Co., 94 Pearl St., and 126 High St.
- Hayes, J. Howard (Junior), Mech. and Sales Engr., The Platt Iron Wks. Co., 94 Pearl St.
- Heermann, Frederick M., Engr. and Spec. Inspr., Factory Mut. Fire Ins. Cos., 31 Milk St.
- Herrick, Charles H., N. E. Rep. Gas Eng. Dept., National Meter Co., 159 Franklin St.
- Hildreth, William Osgood (Junior), Engr., The Lamson Co., 161 Devonshire St.
- Hill, Walter L., Hill-Ray Engrg. Co., 110 State St.
- Hobbs, Franklin Warren, Treas. and Exec. Officer, Arlington Mills, 78 Chauncy St.
- Hogan, Patrick Henry, N. E. Mgr., Dearborn Chem. Co., John Hancock Bldg.
- Hosmer, Sidney, Elec. Engr., Edison Elec. Ill. Co., 39 Boylston St.
- Hubbard, Allen, Cons. Engr., 88 Pearl St.
- Hunter, Charles Welsh, Gas Engr., Stone & Webster Engrg. Corp., 147 Milk St.
- Hurdell, Victor Hollister (Junior), Salesman, Internatl. Steam Pump Co., 465 John Hancock Bldg.; also, Providence, R. I.
- Hurley, Daniel (Junior), Technology Chambers; also, Providence, R. I.
- Hussey, Oren S., Treas., Frank Ridlon Co., 253 A St.
- Hutchison, Richard, Dist. Sales Mgr., Babcock & Wilcox Co., 35 Federal St.
- Jackson, Dugald C., 84 State St., and Mass. Inst. of Tech.; also, D. C. & Wm. B. Jackson, 111 W. Monroe St., Chicago, Ill.
- Jackson, Henry Docker, Cons. Engr., 88 Broad St.
- Jaques, Wm. H., Capt. and Pres., Hampton Water Wks. Co., Progress Mfg. Co., Hotel Puritan, Commonwealth Ave.; also, Little Boar's Head, N. H.
- Jealous, Arthur R. (Junior), Genl. Elec. Co., 84 State St.
- Jennings, Edward M. (Junior), Jarvis Engrg. Co. and Sales Agt., Parson Mfg. Co., 63 Oliver St.
- Johnston, William Atkinson, Prof. of Theoretical and Applied Mechanics, Mass. Inst. of Tech.
- Kellogg, Alfred S., Cons. Engr.
- Kendricken, Hon. Paul H., Ingalls & Kendricken, Inc., 80 Sudbury St.
- Keough, William T., Business Agt., Boston Pub. Schs., 168 Tremont St.
- Keyes, Frederic Hale, Sanitary Engrg. Co., Rm. 341, 739 Boylston St.
- Kilgour, Dwight Foster, Mech. Engr. for Chas. E. Cotting, Trustee, 11 Pemberton Sq.
- Kimball, Richard D., 6 Beacon St.
- Kunhardt, Lewis Henry, V. P. and Engr., Boston Mfrs'. Mut. Fire Ins. Co., 31 Milk St.

MASSACHUSETTS, Boston (Continued).

- Lacount, Henry Osgood, Engr. and Asst. Secy. Inspc. Dept.,
Asso. Factory Mut. Fire Ins. Co., 31 Milk St.
- Lawton, M. A., Treas., A. J. Morse & Son, Inc., 221 High St.
- Leland, Sanford Daniels, Pres. and Genl. Mgr., Mfg. Equip. &
Engrg. Co., 209 Washington St.
- Libbey, Joseph Harold, Mech. and Elec. Engr., Stone & Webster
Engrg. Corp., 147 Milk St.
- Little, Arthur Dehon, Chem. Engr., Pres. and Mgr., Arthur D.
Little, Inc., 93 Broad St.
- Lobben, Peder, Mech. Engr., 289 A St.
- Loring, Harrison, Jr., Treas. and Mech. Engr., R. S. Brine
Transportation Co., 43 India St.
- Lucker, Grover Cleveland (Junior), Agt., Ingersoll-Rand Co.,
65 Oliver St.
- McIntosh, Walter S., Wks. Mgr., S. A. Woods Mch. Co.
- McLauthlin, Martin B., Engr. and Treas., Geo. T. McLauthlin
Co., 120 Fulton St.
- McNeil, Joseph Hensley, Ch. Insp. Boston Dept., Hartford
Steam Boiler Inspc. & Ins. Co., 101 Milk St.
- Main, Charles T., Engr., Rms. 817-833, 201 Devonshire St.
- Mazzur, Frank Amedee, N. E. Mgr., Wheeler Condenser &
Engrg. Co., 141 Milk St.
- Merrill, Frank A., Mgr., The Merrill Co., 19 Pearl St.
- Metcalf, Leonard, Cons. Civ. Engr., Metcalf & Eddy, 14 Beacon
St.
- Miller, Edward Furber, Prof. Steam Engrg., Mass. Inst. of
Tech.
- Monks, Archibald G., Partner, Monks & Johnson, 7 Water St.
- Moody, Herbert A., Cons. Industrial Engr., 178 Devonshire St.
- Morgan, William F., N. E. Agt., Am. Mfg. Co., Beacon and Joy
Sts.
- Mosman, Chas. Tyler, Dist. Engr., Genl. Elec. Co., 84 State St.
- Moultrop, Irving E., Mech. Engr., Edison Elec. Ill. Co. of Bos-
ton, 39 Boylston St.
- Nicholl, John Seymour (Junior), Publicity Engr. with Walter
B. Snow, 170 Summer St.
- Norton, Charles L., Prof. Heat Measurements, Mass. Inst. of
Tech.
- Osteman, Carl G., Receiver, Natl. Woodworking Mchy. Co., 94
W. Central St.
- Paine, Sidney B., Mgr. Mill Power Dept., Genl. Elec. Co., 84
State St.
- Palmer, George W., Jr., Elec. Engr., Bay State St. Ry. Co.,
84 State St.
- Park, William R., Cons. Engr., Hancock Inspirator Co., 23
Watson St., Sta. A.
- Parker, Charles H., Asst. Supt. Generating Dept., Boston Edi-
son Co., 39 Boylston St.
- Parker, Lee Hamilton, Ry. Engr., Stone & Webster Engrg.
Corp., 147 Milk St.
- Pearson, Albert L., Elec. Engr., Lockwood, Green & Co., 60
Federal St.
- Pendergast, Roland Ball, Engr., Stone & Webster Engrg. Corp.
- Perkins, John B., Pres., John B. Perkins Co., 141 Milk St.

MASSACHUSETTS, Boston (Continued).

- Perry, Frank B., Mill Power Dept., Genl. Elec. Co., 84 State St.
 Pierce, Richard H., Cons. Engr., 35 Congress St.
 Powell, E. Burnley, Mech. Engr., Stone & Webster Engrg. Corp., 147 Milk St.
 Prout, Henry Byrd (Junior), Salesman, Westinghouse Mch. Co., 201 Devonshire St.
 Reynolds, Frank W., Member of Firm, Lockwood, Greene & Co., 60 Federal St.
 Richardson, Edward Bridge, Partner, Richardson & Hale, Cons. Engrs., 85 Water St.
 Riley, Joseph C., Assoc. Prof. Mech. Engrg., Mass. Inst. of Tech.
 Rossman, James R., Jr. (Junior), Ch. Engr., Steel Cable Engrg. Co.
 Rowell, Henry K., Industrial Engr., Prin. Asst. Charge Organization Dept., Chas. T. Main.
 Russell, Walter B., Dir., Franklin Union.
 Seymour, Joseph W. (Junior), Mgr., Boston Office, The C. & G. Cooper Co., 201 Devonshire St.; also, Edgewood, R. I.
 Shedd, Frank Edson, V. P. and Ch. Engr., Lockwood, Green & Co., 60 Federal St.
 Sherburne, Kenneth (Junior), Engr., Automatic Appliance Co., 172 Columbus Ave.
 Smith, Albert Samuel, Supt. of Bldgs. and Power, Mass. Inst. of Tech.
 Smith, Sidney L., Mech. Engr., 90 Elm Hill Ave., Roxbury.
 Snow, Sylvester M., Cons. Engr., 85 Water St.; also, Providence, R. I.
 Snow, Walter B., Publicity Engr., 170 Summer St.
 Snow, Wm. Gage, N. E. Mgr., Warren Webster & Co. of Camden, N. J., Pa. Mut. Bldg.
 Starbuck, George F. (Junior), Draftsman, Boston Elev. Ry.
 Starkweather, Wm. G., N. E. Mgr., C. H. Wheeler Mfg. Co., and A. L. Ide & Sons, 53 State St.
 Stevens, Harold L., Dist. Sales Agt., Lackawanna Steel Co., 40 Central St.
 Stoddard, Geo. Howland, Treas. and Mgr., Quincy Market Cold Storage & Warehouse Co., 133 Commercial St.
 Taft, Theo. H., Asst. Prof. Mech. Engrg., Mass. Inst. of Tech.
 Teague, Walter Owen, Engr. and Inspr., Associated Factory Mutual Fire Ins. Cos., 31 Milk St.
 Tenney, Albert Ball, V. P., Malden Elec. & Suburban Gas & Elec. Co., and others, 201 Devonshire St.
 Thompson, Edward C. (Junior), Genl. Mgr., Victor Tire Traction Co., 16 State St.
 Timbie, William H., Head of Dept. of Applied Science, Wentworth Inst.
 Tobin, Robert P., Ch. Tech. Dept., Vacuum Oil Co., 49 Federal St.
 Tolman, James P., Pres., Samson Cordage Wks., 88 Broad St.
 Uhl, William F., Hyd. Engr. with Charles T. Main, Rm. 819, 201 Devonshire St.
 Walworth, Arthur C., Pres., Malleable Iron Fittings Co. of Branford, Conn., 100 Pearl St.
 Warner, Robt. L., Warner, Tucker & Co., 85 Devonshire St.

MASSACHUSETTS, Boston (Continued).

- Watson, Herbert L. (Junior), Sales Engr., Allis-Chalmers Co., 50 Congress St.
- Watson, Wm., Secy. Am. Academy Arts and Sciences, 107 Marlborough St.
- Wattles, Joseph Warren, 3d (Junior), Commer. Engr. Sales Dept., Edison Elec. Ill. Co., 39 Boylston St.
- Whiting, Charles W., Cons. Engr., 33 Broad St.
- Whitney, William S., Supervising Engr., Am. Woolen Co.
- Williams, Llewellyn, Suptg. Engr., United Fruit Co., 131 State St.
- Williston, Arthur L., Prin., Wentworth Inst.
- Williston, Belvin Thomas, Wks. Mgr., United Injector Co., 23 Watson St.
- Winsor, Paul, Ch. Engr. M. P. and R. S., Boston Elevated Ry. Co., 101 Milk St.
- Winther, Chas. A. G., Pres. and Mgr., Chas. A. G. Winther Co., Inc., 91 High St.
- Woodbury, C. J. H., Cons. Engr., 45 Milk St.
- Woods, Frank F., Pres. and Treas., S. A. Woods Mch. Co.
- Brighton.**—De Lany, George Samuel, Supt., Rivett Lathe Mfg. Co.
- Brockton.**—Washburn, William S., 1363 Main St., Campello Sta.
- Brookline.**—Appleton, Chas. B., Mech. Engr., Netherlands Rd.
- Kenrick, Alfred Eugene, Kenrick Bros., 214 Washington St.
- Webber, William Oliver, Cons. Engr., 7 Wellington Terrace.
- Cambridge.**—Brooks, Edwin C., Supt., Water Wks., City Hall.
- Crothers, Charles Edward, Jr. (Junior), Mech. Engr., 1663 Cambridge St.
- Davis, John Francis (Junior), with F. H. Davis, 175 Richdale Ave.
- Dodds, William B. (Junior), Mass. Ltg. Cos.
- Gale, Horace B., Ch. Engr., Simplex Elec. Htg. Co.
- Harding, Adalbert (Junior), 24 Langdon St.
- Hollis, Ira N., Prof. Engrg., Harvard Univ.
- Kennedy, F. Lowell, Asst. Prof. Drawing and Mch. Design, Harvard Univ.
- Leavitt, E. D., Cons. Engr., Ret., 33 Garden St.
- Markham, Edward R., Instr. Mech. Engrg., Harvard Univ., and Rindge Tech. Sch.
- Marks, Lionel S., Prof. Mech. Engrg., Harvard Univ.
- Mellen, Edwin D., Central Sq.
- Nelson, Eric Hugo, Ch. Draftsman, Geo. F. Blake Mfg. Co.
- Norris, Almon E., Ch. Engr., Mead-Morrison Mfg. Co., 31 Main St.
- Norton, Arthur Edwin, Asst. Prof. Mech. Drawing, Harvard Univ.
- Pearson, Charles Ivar, Mech. Draftsman and Designer, 36 Trowbridge St.
- Rote, John G. (Junior), 3 Dana St.
- Swain, George F., Cons. Engr., Member, Boston Transit Com., Cons. Engr., Mass. R. R. Com., Prof. Civ. Engrg., Graduate Sch. Applied Science, Pierce Hall, Oxford St., Harvard Univ.
- Whiting, S. B., 11 Ware St.
- Yates, Sheldon Smith (Junior), Instr. Civ. Engrg., Harvard Graduate Sch. of Engrg., Pierce Hall.

MASSACHUSETTS (Continued).

Cambridgeport.—Long, Jeremiah C., Ch. Engr., Boston Woven Hose & Rubber Co.

Charlestown.—Goldsmith, Clarence, Asst. Engr. in Charge High Pressure Fire Service, Pub. Wks. Dept., City of Boston, 1 City Sq.

Chelsea.—Higgins, George F., Treas., Gem Mfg. Co.

Larkin, William H., Jr., Mech. Engr., Revere Rubber Co.

Chicopee.—Jenness, Chas. Harvey, Instr. Mech. Drawing, Manual Training Dept., Chicopee H. S.

Chicopee Falls.—Squire, Raymond Samuel (Junior), Engr. of Tests, Engrg. Dept., Stevens-Duryea Co.

Whiteside, Walter Hunter, Stevens-Duryea Co.

Clinton.—Hosmer, Amos G., Mech. Supt., Lancaster Mills, 1 Green St.

Dorchester.—Bixby, Walter (Junior), 126 Rosseter St.

Chandler, Howard T., Asst. Supt., Walter Baker & Co., Ltd.

Meisel, Otto C. F. (Junior), 10 Upland Ave.

Murphy, Frederick E., 31 Sagamore St.

East Boston.—Middleton, Percy Howe, Engr. and V. P., The Crandall Eng. Co., 102 Border St.

Monteagle, Robt. Chas., Asst. Mgr. and Engr., The Lockwood Mfg. Co.

Robinson, Edward P., Supt., Atlantic Wks., 80 Border St.

Tobey, Wm. L., Prop., Thermex Silencer Wks., 9 Lewis St.

East Bridgewater.—McLean, Robert Walter (Junior), Carver Cotton Gin Co.

East Cambridge.—Aborn, George P., Mgr., Blake & Knowles Steam Pump Wks.

Murray, Arthur F. (Junior), Equip. Engr., Blake & Knowles Steam Pump Wks.

Parker, Austin Wilbur, Mech. Engr., Blake & Knowles Steam Pump Wks.

Worcester, H. E., Supt., Revere Sugar Refinery.

East Walpole.—Lockery, Charles E., Staff Asst., F. W. Bird & Co.

East Watertown.—Bitterlich, Walter J. (Junior), Development Engr., Hood Rubber Co.

Fall River.—Gilmore, George Parley, Mech. Engr., Am. Ptg. Co.

Henry, William Thomas, P. O. Box 152, and 30 Borden Blk.

Fitchburg.—Barnes, William O., Mech. Engr., Iver Johnson Arms & Cycle Wks.

Dillon, Frederick N., Treas., D. M. Dillon Steam Boiler Wks.

Sheldon, Thos. C., Secy. and Treas., Fitchburg Duck Mills.

Simonds, Daniel, Pres., Simonds Mfg. Co., 35 North St.

Gloucester.—Campbell, Jeremiah.

Greenfield.—Harris, Harry E., Genl. Supt. Tap and Die Plant, Wells Bros. Co.

Hawks, Arthur S., P. O. Box 20.

Wells, Frank O., Pres. and Treas., Wells Bros. Co.

Holyoke.—Baldwin, Allen Welling (Junior), Engrg. Dept., The Deane Steam Pump Co.

Chase, Henry Mayo, Mech. Engr., Deane Steam Pump Co.

Fleming, Wills M., Engr. in Charge Drawing Room, Deane Steam Pump Co.

Lambson, DeWitt Clinton, Local Mech. Engr., Am. Thread Co.

MASSACHUSETTS, Holyoke (Continued).

Metcalf, Frank Hamilton, Asst. Genl. Mgr., Farr Alpaca Co.
 Newcomb, Chas. L., Pres., Mech. Engr. and Genl. Mgr., Deane
 Steam Pump Co.

Newcomb, Robert E. (Junior), Asst. Supt. and Mech. Engr.,
 Deane Steam Pump Co.

Sears, Frank M., Treas. and Mgr., Holyoke Steam Boiler Wks.

Thompson, Herbert Leslie (Junior), Engrg. Dept., The Deane
 Steam Pump Co.

Hopedale.—Burbank, Louis S., Asst. Ch. Draftsman, M. E. Draper
 Co.

Hyde Park.—Bentley, O. D. H., Mgr. Turbine Dept., B. F. Sturte-
 vant Co.

Latham, Harry M., Mgr. Power Apparatus Dept., B. F. Sturte-
 vant Co.

Leonard, Merton S., Ch. Engr., B. F. Sturtevant Co.

Suck, Adolph, Arch. and Engr., 94 Arlington St.

Indian Orchard.—Cook, Harry Hall (Junior), Engr., The Chap-
 man Valve Mfg. Co.

Shirley, Robert, Wks. Mgr., Chapman Valve Mfg. Co.

Lancaster.—Richardson, George Edward.

Lawrence.—Diman, Geo. Henry, Cons. Engr., Wood Worsted Mill.
 Eichler, Walter G. (Junior), Asst. Mech. Engr. Worsted Dept.,
 Pacific Mills.

Emerson, H. B., Supt. of Mech. Dept., Arlington Mills.

Hartshorne, William Davis, Res. Agt., Arlington Mills.

Knowlton, Winfield B., Ch. Draftsman, Am. Woolen Co.

Mellor, Hiram L., Pres. and Mgr., Lawrence Pump & Eng. Co.

Parker, Walter Edward, Agt., Pacific Mills.

Schwarz, Franz H. (Junior), Mech. Engr., Lower Pacific Mills.

Smith, Charles P. (Junior), Lower Pacific Mills.

Lee.—Stevenson, Louis T. (Junior), Engr., Mountain Mill Paper
 Co.

Leeds.—Torrance, Chas. Everett (Junior), Treas. and Mech.
 Engr., Northampton Emery Wheel Co.

Lexington.—Watson, Frank (Junior).

Lowell.—Ames, Geo. Edgar, Mech. Supt., Lawrence Mfg. Co.

Connell, John J., Agt., Tremont & Suffolk Mills.

Keables, Austin Dow (Junior), with John A. Stevens, Engr.,
 107 Merrimack St.

Nourse, Franklin, P. O. Box 1236.

Perkins, G. Hawthorne, Head Textile Engrg. Dept., Lowell
 Textile Sch.

Safford, Arthur Truman, Asst. Engr., Locks and Canals, Cons.
 Hyd. Engr., 66 Broadway.

Stevens, John A., Cons. Engr., 107 Merrimack St.

Thomas, Edward W., Agt., Boott Mills.

Thompson, Albert W., Supt., Saco-Lowell Shops.

Wesson, Paul Bancroft, Mfg. Foreman and M. M., Lowell Mch.
 Shop.

Ludlow.—Bennett, Geo. G. (Junior), Mill Supt., Ludlow Mfg. As-
 sociates.

Fogler, Ben Baker (Junior), Engr., Ludlow Mfg. Associates.

Stevens, Sidney, V. P., Ludlow Mfg. Associates.

Weidner, Paul G., Ludlow Mfg. Associates.

MASSACHUSETTS (Continued).

Lynn.—Carroll, M. B. (Junior), Turbine Sales Dept., Genl. Elec. Co., Bldg. 64; also, Schenectady, N. Y.

Johnson, Werner, Asst. Engr. Turbine Dept., Genl. Elec. Co.

Loring, Ernest Johnson, Designer, Turbine Nozzles and Buckets, Genl. Elec. Co.

Nusim, Melach I., Turbine Engrg., Genl. Elec. Co.

Marblehead.—Curtis, Greely S., Treas., Burgess Co. & Curtis.

Mittineague.—Konstankewicz, Michael John (Junior), Mech. Engr., Strathmore Paper Co.

Williamson, George E. (Junior), Ch. Engr., Strathmore Paper Co.

Neponset.—Hibbard, Thomas, Treas and Mech. Engr., Geo. Lawley & Sons Corp.

New Bedford.—Cushman, Herbert E., Treas. and Genl. Mgr., Morse Twist Drill & Mch. Co.

Gladding, Wanton Martin, Mech. Supt., Morse Twist Drill & Mch. Co.

Macdonald, Duncan H., 277 Earl St.

Reed, Fred M., Mech. Engr., Morse Twist Drill & Mch. Co.

Stetson, George R., Pres. of Bd. of Dirs., New Bedford Gas & Edison Light Co., 121 Middle St.

Newburyport.—Blood, John Balch, 232 High St.

Newton.—Leach, William H., Jr., 7 Peabody St.

Wilson, Chester Worcester (Junior), Lowell Mch. Shop.

Newton Highlands.—Thompson, Sanford E., Cons. Engr., Odd Fellows Bldg., and Oliver Bldg., 141 Milk St., Boston.

Newton Upper Falls.—Banfield, Frederic E., Jr. (Junior), Asst. Supt., Saco-Lowell Shops.

Curley, Robert Sylvester (Junior), Saco-Lowell Shops.

Mills, Charles, Cons. Engr., Saco-Lowell Shops.

North Adams.—Hunter, James D., V. P., Hunter Mch. Co.

North Andover.—Rockwell, Samuel Forbes, Mfg. Supt., Davis & Furber Mch. Co.

North Brookfield.—Richards, Thomas Gleason, Pres. and Mgr., B. & R. Rubber Co.

North Plymouth.—Damon, John H., M. M. and Expt. on Rope Transmission, Plymouth Cordage Co.

Norwood.—Adam, William Joseph, Mech. Engr., The Plimpton Press.

Nute, Edwin Lee (Junior), Genl. Supt., Winslow Bros. & Smith Co.

Pittsfield.—Abbott, Chas. Carroll, Cons. Engr., Triumph Voting Mch. Co.

Blasdel, Arthur F., Mfg. Supt., Genl. Elec. Co.

Power, Pomeroy W., Mech. Engr., Genl. Elec. Co.

Robbins, John L. (Junior), Mech. Engr., Robbins, Gamwell & Co.

Quincy.—Crain, John J., Elec. Engr., Fore River Shipbuilding Co.

Shelburne Falls.—Mackenzie, Edmund, Power Constr. Co.

Somerville.—Eldredge, A. H., Cons. Engr., N. E. States Office, North Packing & Provision Co.

South Boston.—Blood, Chas. W. H., V. P. and Mech. Engr., S. A. Woods Mch. Co., Damrell St.

Tilden, James A., Genl. Mgr., Hersey Mfg. Co.

MASSACHUSETTS (Continued).

South Framingham.—Butcher, Joseph J., Cons. Engr. Motor Truck Dept., Guiler Engrg. Co.

Robb, D. W., Pres., Robb Engrg. Co., Ltd.

Scott, Henry Francis, M. M., Dennison Mfg. Co.

Southbridge.—Bailey, Harry E. B., Engr. of Wks., Am. Optical Co.

Day, George H., Asst. Supt., Am. Optical Co.

Vaughan, Aubrey W. (Junior), Industrial Engr., Am. Optical Co.

Springfield.—Barstow, Francis Loring, Engr., Leitch & Barstow, Engrs., 172 Main St.

Baush, William H., Mech. Engr. and in Charge Sales, Natl. Equip. Co.

Bliss, Charles Eugene, Member of Firm, Samuel M. Green Co., 318 Main St.

Craig, Charles H., Jr., Member of Firm, McClintock & Craig, 33 Lyman St.

Curtis, Walter Molbray, Mgr. Engrg. Dept., N. E. Audit Co.

Damon, Walter Henry, Supt. of Generating, United Elec. Light Co., 32 Bancroft St.

Green, Samuel M., Cons. Engr., Hitchcock Bldg., 318 Main St.

McClintock, Edward H., Engr. and Arch., McClintock & Craig, 33 Lyman St.

Pellissier, George E., Genl. Mgr. and Treas., Pellissier Engrg. Co., 21 Besse Pl.

Rider, Thomas J., Mech. Engr., Rider-Bagg Co.

Ryder, Malcolm P., Engr., Witherbee Igniter Co., Birnie Ave. and Arch St.

Taunton.—Cutter, George Albert, Genl. Mgr., Cell Drier Mch. Co. Greensmith, Jas. E., Genl. Supt., Mason Mch. Wks.

Tufts College P. O.—Anthony, Gardner C., Dean Engrg. Sch., Tufts College.

Chase, Charles H., Prof. Steam Engrg., Tufts College.

Stewart, Chas. E. (Junior), Assf. Prof. Mech. Arts, Tufts College.

Svensen, Carl Lars (Junior), Instr. Mech. Engrg., Tufts College.

Walpole.—Bonney, Herbert Marshall (Junior), Ch. Draftsman, L. F. Fales.

Lewis, Arthur Loughton (Junior), with L. F. Fales.

Waltham.—Cassidy, Andrew George, M. M., Waltham Watch Co. Eaton, Henry Chas., Foreman Engrg. Dept., Waltham Watch Co.

Monaghan, James F., Cons. Engr., Mech. Engr., Waltham Bleachery & Dye Wks.

Ohlson, Olof, Mech. Supt., Waltham Watch Co.

Watertown.—Erlandson, Emil William (Junior), Charge of Engrg., Mass. Fan Co.

Wenham.—Cunningham, Thos.

West Lynn.—Alexander, Magnus W., Genl. Elec. Co.

Campbell, Gordon M., Turbine Dept., Genl. Elec. Co.

Hall, Walter Atwood, Asst. to Mgr., Lynn Wks., Genl. Elec. Co.

Moss, Sanford A., Engr. Turbine Research Dept., Genl. Elec. Co.

Norton, Fred Elmer, Genl. Elec. Co.

MASSACHUSETTS, West Lynn (Continued).

Pentz, Albert D., Box 33.

Rice, Richard H., Genl. Elec. Co.

Warren, Aldred Kennedy, Mfg. Engr., Genl. Elec. Co.

West Medford.—Godfrey, Hollis, Cons. Engr., 63 Brooks St.

West Newton.—Marshall, Norman, Cons. Engr., 107 Chestnut St.

Westfield.—Cushing, Geo. H., Genl. Supt., H. B. Smith Co.

Mitchell, Guy Edward, Hampden R. R. Corp.

Winchendon.—Whitney, Baxter D., Partner, Baxter D. Whitney & Son.

Whitney, Wm. M.

Wollaston.—Stevens, Jesse F., 14 Prospect Ave.

Worcester.—Alden, George I., Pres., Norton Co., and Pres. and Genl. Mgr., Norton Grinding Co.

Allen, Charles M., Prof. Hyd. Engrg., Worcester Poly. Inst.

Backlin, Axel F., Asst. to Ch. Engr., Am. Steel & Wire Co.

Beth, Hugo W. H., Operating Engr., Norton Co.

Bird, William W., Prof. Mech. Engrg. and Dir. Washburn Shops, Worcester Poly. Inst.

Burgess, A. Bradley (Junior), Genl. Mgr., Stand. Plunger Elev. Co., Box 254.

Carroll, Elbert Henry, Supt., Morgan Constr. Co., 21 Lincoln St.

Coghlin, John P., Pres. and Treas., Coghlin Elec. Co., 257 Main St.

Crooker, Paul Rhodes (Junior), Supt.'s Office, Norton Grinding Co.

Daniels, Fred Harris, Ch. Engr., Am. Steel & Wire Co., 94 Grove St.

Dietz, Carl F., Advisory Engr. and Asst. Sales Mgr., Norton Co.

Doane, John Appleton, Mgr., Worcester Piston Ring & Mch. Wks., 22 Commercial St.

Edwards, Victor E., V. P., Morgan Constr. Co., 21 Lincoln St., Sta. A.

Fairfield, Howard P., Instr., Worcester Poly. Inst.

Gallagher, Robert Thomas, Ch. Draftsman Engrg. Dept., Am. Steel & Wire Co.

Gallup, David L., Asst. Prof. Gas Engrg. Worcester Poly. Inst.

George, Jerome R., Ch. Engr., Morgan Constr. Co., 21 Lincoln St.

Gifford, Albert J. (Junior), Partner, W. H. Leland & Co.

Gordon, Albert Anderson, Jr., Supt., Crompton & Knowles Loom Wks.

Higgins, John W. (Junior), Pres. and Treas., Worcester Pressed Steel Co., North Ave.

Hill, Edgar Logan (Junior), Supt. Elec. Cable Wks., Am. Steel & Wire Co., P. O. Box 553.

Hodge, Wm. W. (Junior), Asst. Supt. Elec. Cable Wks., Am. Steel & Wire Co.

Hutchins, George Francis, Genl. Supt., Crompton & Knowles Loom Wks.

Jefferies, E. A. W., Mech. Engr., Morgan Constr. Co.

Jenckes, Lawrence Bates, Engr., Crompton & Knowles Loom Wks.

Larsson, Thure L. F., Mech. Engr., 34 Holden St.

Logan, James, First V. P. and Genl. Mgr., U. S. Envelope Co., 75 Grove St.

MASSACHUSETTS, Worcester (Continued).

- Mason, William, 78 Burncoat St.
 Morgan, Paul B., Treas., Morgan Constr. Co., 21 Lincoln St.
 Morgan, Ralph Landers, Cons. Engr., 452 Main St.
 Parker, Chas. D., Mech. Engr., A. Burlingame Co., 22 Cypress St.
 Rawson, Louis W., Supt. Washburn Shops, Worcester Poly. Inst.
 Read, Carleton A., Prof. Steam Engrg., Worcester Poly. Inst.
 Reed, Chester Turner (Junior), Pur. Engr., Reed & Prince Mfg. Co.
 Reed, Edgar Howard (Junior), Supt., Reed & Prince Mfg. Co., Duncan Ave.
 Rice, Alva C., Cons. Hyd. and Mech. Engr., 5 Oberlin St.
 Riley, R. Sanford, Pres., Sanford Riley Stoker Co., Ltd., 314 Main St.
 Rockwood, Geo. I., Cons. Engr., 38 Harlon St.
 Scott, Geo. H., Mech. Engr., 30 Channing St.
 Searle, Wilbur C. (Junior), Heald Mch. Co.
 Smith, Alton Lincoln, Prof. Drawing and Mch. Design, Worcester Poly. Inst.
 Smith, Harold B., Prof. Elec. Engrg., Dir. Elec. Engrg. Dept. Worcester Poly. Inst.
 Turner, Charles H. (Junior), Mech. Engr., Osgood Bradley Car Co.
 White, James A. (Junior), Wks. Mgr., Worcester Pressed Steel Co.
 Williams, Fay Bailey (Junior), Estimator, Osgood Bradley Car Co.
 Williams, Richard Grant (Junior), Charge of Mech. Testing Lab., Norton Co.
 Wyman, Horace, Cons. Engr., 20 Harvard St.

MICHIGAN

- Almont.**—Cork, Robert L. (Junior), Ch. Engr., Almont Mfg. Co.
Ann Arbor.—Allen, John Robins, Prof. Mech. Engrg., Univ. of Mich., 221 New Engrg. Bldg.
 Anderson, Henry Clay, Prof. Mech. Engrg., Univ. of Mich., Engrg. Bldg.
 Bursley, Joseph Aldrich, Junior Prof. Mech. Engrg., Univ. of Mich.
 Cooley, M. E., Prof. Mech. Engrg., Dean Dept. of Engrg., Univ. of Mich.
 Denison, Charles S., Prof. Stereotomy, Mechanism and Drawing, Univ. of Mich.
 Emswiler, John Edward (Junior), Asst. Prof. Mech. Engrg., Univ. of Mich., New Engrg. Bldg.
 Fessenden, Chas. Horace (Junior), Asst. Prof. Mech. Engrg., Univ. of Mich., 333 New Engrg. Bldg.
 Keeler, Hugh Edward (Junior), 503 William St., E.
 Miggett, William Lincoln, Prof. Shop Practice and Supt. Engrg. Shops, Univ. of Mich.
 Verner, William Franklin (Junior), Instr. Mech. Engrg., Univ. of Mich.
 Zowski-Zwierzchowski, S. J., Prof. Mech. Engrg., Univ. of Mich.

MICHIGAN (Continued).

Battle Creek.—Bird, John C., Mech. Engr., Union Steam Pump Co.

Dean, Edmund Willard, Ch. Draftsman, Duplex Ptg. Press Co.

Duerner, Henry L., Jr., Mech. Engr., 84 Fremont St.

Galloway, Thomas, Mech. Engr., 18 Wendell St.

Hawthorne, Primm R., Supt. Gas Eng. Dept., Nicholas & Shepard Co.

Hvid, Rasmus M., V. P., R. M. Hvid Co., Old Natl. Bank Bldg.

Metcalf, F. M., Mech. Engr., Am. Steam Pump Co.

Bay City.—Howlett, Lewis G. (Junior), Supt., Industrial Wks.

Perry, Ernest, Mgr., Industrial Wks.

Benton Harbor.—Capen, Thomas W., 748 Ogden Ave.

Calumet.—Williams, Howard E., Ch. Draftsman, Calumet & Hecla Min. Co.

Detroit.—Alden, Herbert W., Ch. Engr., Timken-Detroit Axle Co., Clark Ave.

Baldwin, Abram T., V. P. and Treas., Precision Instrument Co., 49 Larned St., W.

Barber, Clarence M., Civ. Engr., Smith, Hinchman & Grylls.

Barnes, Stuart Gray, Mgr., Solvay Process Co.

Barton, Henry L., Asst. Dir. of Production, Genl. Motors Co., Cor. Brush and Congress Sts.

Beall, Frank F. (Junior), Factory Mgr., Packard Motor Car Co.

Bennett, Joseph A., Chalmers Motor Co.

Bigelow, Frank B., Sales Mgr., Murphy Iron Wks.

Bingham, Elbert Howard, Wks. Mgr., The Solvay Process Co.

Bornholt, Oscar Charles, Mech. Engr., Ford Motor Co.

Bourquin, James F. (Junior), Genl. Mgr., Paige Detroit Motor Car Co.

Breneman, Paul Edward (Junior), Engrg. Dept., Hupp Motor Car Co.

Calder, John, Asst. to Henry Martin Leland, Cadillac Motor Car Co.

Coffin, Howard E., V. P., Hudson Motor Car Co.

Conant, Wm. S., Cons. Engr., Bank Chambers, 80 Griswold St.

Coon, Thurlow E. (Junior), Mech. Engr., The Coon-De Visser Co., 1924-1925 Ford Bldg.

Cox, Claude E., Res. Dir. of Research, Genl. Motors Co., 88 Congress St., E.

Cummins, Peter Augustine (Junior), Spec. Apprentice, Shop Practice, Detroit Steel Products Co.

Cushman, Arthur Wesley (Junior), Supt., Parker Webb & Co., Michigan and 20th Sts.

Davock, Harlow N. (Junior), Mgr., Davock Realty Co., 230 Blaine Ave.

Decker, Edward P., Pres., E. P. Decker & Co., 80 Griswold St.

Doughty, A. J., Factory Mgr., Burroughs Adding Mch. Co.

Dow, Alex, V. P. and Genl. Mgr., Edison Ill. Co., 18 Washington Ave.

Dunham, George W., V. P. and Cons. Engr., Chalmers Motor Co.

Dwyer, Emmet (Junior), Asst. Supt., Mich. Stove Co.

Eays, Thomas C. (Junior), Mgr. Ry. and Ltg. Dept., Westinghouse Elec. & Mfg. Co., 27 Woodward Ave.

Farmer, Thos., Warner & Swasey Co.

MICHIGAN, Detroit (Continued).

- Fekete, Stephen I. (Junior), Engrg. Dept., Hudson Motor Car Co.
- Fortune, John Robert, Ch. Engr., Murphy Iron Wks.
- Gernandt, Waldo George (Junior), Motor Designing Engr., Packard Motor Car Co.
- Hargreaves, Robert Cattle (Junior), 53 Rowena St.
- Hess, Samuel P. (Junior), Motor Spring Dept., Detroit Steel Products Co.
- Hill, Reuben, Factory Mgr., Detroit Lubricator Co.
- Hinchman, Theodore H., Jr., Cons. Engr., 708 Washington Arcade.
- Hodge, Harry S., 83 Alfred St.
- Holmes, Harold W. (Junior), Genl. Mgr., The Puritan Brick Co., V. P., The Detroit Tool Co., 1325 Penobscot Bldg.
- Jackson, Roscoe B. (Junior), Treas. and Genl. Mgr., Hudson Motor Car Co.
- Johnson, Frank, Designer, Cadillac Motor Car Co.
- Joy, Francis B., Genl. Mgr., Detroit Htg. & Ltg. Co.
- Kahn, Julius, Pres., Trussed Concrete Steel Co., Trussed Concrete Steel Bldg.
- Kales, Wm. Robert (Junior), Ch. Engr., Whitehead & Kales Iron Wks., Beecher Ave. and Mich. Central R. R.
- Keep, William J., Supt., Mich. Stove Co.
- Keller, E. E., Pres., Detroit Insulated Wire Co.
- Kirby, Frank E., Engr., 609 Stevens Bldg.
- Knight, Alfred H., Asst. Engr., Packard Motor Car Co.
- Kryzanowsky, Constant J., Mech. Engrg. Dept., Genl. Motors Co.
- Lane, Henry Marquette, Cons. Fdy. Engr., Pres., The H. M. Lane Co., 18 Piquette Ave., E.
- Leland, Henry Martin, Genl. Mgr., Cadillac Motor Car Co., 1343 Cass Ave.
- Lent, Leon B., Constr. Engr., Ford Motor Co.; also, Brewster, N. Y.
- Lester, Clarence R., Inspr. Sales Dept., Packard Motor Car Co.
- Lowe, Henry Leland (Junior), Genl. Motors Co.
- Luehrs, Daniel Michael (Junior), Ch. Engr. and Factory Mgr., McCreery Engrg. Co.
- Lyon, Tracy, Dir. of Production, Genl. Motors Co.
- McColl, J. R., Member of Firm, Ammerman, McColl & Anderson, Cons. Engrs., 1310 Penobscot Bldg., and Dean Engrg. Dept., Univ. of Detroit.
- MacGregor, Walter, 430 W. Grand Blvd.
- Mason, Frederick H., Spec. in Feed Water Purification and Htg. Power Plant Spec., Brick and Concrete Chimney Constr., 614 Moffat Bldg.
- Mattsson, A. George, Ch. Engr., Great Lakes Engrg. Wks.
- Meyer, Erwin Charles (Junior), Engr., Parish Mfg. Co., 1666 Mt. Elliott Ave.
- Moore, Fredk. Clouston, 124 Connecticut Ave.
- O'Leary, Frank J., On Time Study Staff, Packard Motor Car Co.
- Oliver, E. C. (Junior), Factory Mgr., Renfro Speedometer Co., 302 Palmer Bldg., 70 Washington Blvd.
- Osborn, Francis Conrad, Pres. and Genl. Mgr., The F. C. Osborn Co., 45 E. Fort St.

MICHIGAN, Detroit (Continued).

- Parkhurst, Frederic A., Organizing Engr., 29 Alger Ave.
 Pessano, Antonio C., Pres. and Genl. Mgr., Great Lakes Engrg. Wks.
 Randall, Dwight T., Cadillac Motor Car Co.
 Reid, Edward Snover (Junior), Engr., No. Eng. Wks.
 Richards, Chas. Dexter (Junior), Asst. Engr. of Tests, Solvay Process Co.
 Ross, John L., Prop., Ross & Young Mch. Co.
 Rogers, Lewis C., Exper. Engr., The Solvay Process Co.
 Russel, Walter S., Pres. and Genl. Mgr., Russel Wheel & Fdy. Co., Chene St. and Belt Line R. R.
 Schoen, August, Mech. Engr. Charge Engrg. Dept., Larrowe Constr. Co.
 Shallcross, Watson Comly, Mgr., Caustic Soda Dept., Solvay Process Co.
 Singleton, Arthur B. (Junior), David M. Kerr Mch. Co., 1922 Ford Bldg.
 Smith, Ernest L., West. Rep., R. I. V. Co., 870 Woodward Ave.
 Smith, William H., Factory Mgr., Ford Motor Co.
 Soper, Ellis, Pres., The Soper Co., Ford Bldg.; also, Chattanooga, Tenn.
 Spillman, Harry St. Clair (Junior), Constr. Engr., Continental Motor Mfg. Co.
 Still, Frederick R., Ch. Engr. and Secy., Am. Blower Co.
 Stoddard, Elliott J., Expt., R. A. Parker, Pat. Lawyer, 607 Moffat Blk.
 Stringham, Joseph S., Pres., Frontier Engrg. Co., 1309 Majestic Bldg.
 Sweet, Charles E., Treas., Superior Mch. & Engrg. Co., 51-53 Fort St., E.
 Sweet, Ernest E., Cons. Mech. Engr. and Ch. Engr., Cadillac Motor Car Co.
 Taylor, Cecil Hamelin, Cons. Engr., Taylor & Neuteboom, 518-520 Broadway Central Bldg.
 Treat, Charles Henry (Junior), Am. Blower Co.
 Vincent, Jesse Gurney, Ch. Engr., Packard Motor Car Co., East Grand Blvd.
 Walker, Frederick Wiley, V. P. and Ch. Engr., Comstock, Haigh, Walker Co., Wayne Co. Bank Bldg.
 Whitaker, Henry E., Mech. Engr., Parke, Davis & Co.
 Wilcox, C. C. (Junior), Asst. to Cons. Elec. Engr., Hodenpyl, Hardy & Co., Dime Savings Bank Bldg.
 Wills, C. Harold, Ch. Engr. and Factory Mgr., Ford Motor Co.
 Wingo, Richard T., Pres., Superior Mch. & Engrg. Co., 51-53 Fort St., E.
 Wood, Erwin E., Salesman, Jones & Lamson Mch. Co., Lock Box 421.
- East Lansing.**—Bissell, Geo. W., Prof. Mech. Engrg., and Dean of Engrg., Mich. Agri. College.
 Kunze, Edward J., Asst. Prof. Mech. Engrg., in Charge of Mch. Design and Constr., Mich. Agri. College.
 Polson, Joseph A., Asst. Prof. Mech. Engrg., Mich. Agri. College, 201 Engrg. Bldg.
- Flint.**—Mott, Chas. Stewart, Pres., Weston Mott Co.
Gladstone.—Slining, George J., Supt., Cleveland Cliffs Iron Co.

MICHIGAN (Continued).

- Grand Rapids.**—Cole, Dwight S., Cons. Engr. and Mech. Expt., 623 Ashton Bldg.
 Reeve, Charles D., Factory Mgr., Grand Rapids Brass Co., 90 Scribner Ave.
 Simpson, Tracy Whittelsey (Junior), Secy. and Treas., The Leader Eng. Co.
 Tower, Daniel W., Pres., Grand Rapids Brass Co., 90 Scribner Ave., N. W.
- Houghton.**—Corbett, R. H., Rep., Nordberg Mfg. Co., and 126 Garnet St.
 Glanville, Jas. Gundry, Supt., Isle Royale Stamp Mill.
- Hubbell.**—Burgan, A. L., Mill Supt., Tamarack Min. Co., Osceola Consldt. Mfg. Co., Ahmeek Min. Co.
- Iron Mountain.**—Jones, John T.
- Ishpeming.**—McClure, O. D., M. M., Cleveland Cliffs Iron Co.
- Jackson.**—Allen, John L., V. P. and Genl. Mgr., Hastings Motor Shaft Co.
 Frost, Edward J., Pres. and Genl. Mgr., Frost Gear & Mch. Co., Horton and Tyson Sts.
 Hopkins, George F., Genl. Supt., Frost Gear & Mch. Co.
 McMullen, Vincent E., Genl. Supt., The Field-Brundage Co.
 Maytham, Walter John, Ch. Engr., Cowham Engrg. Co., Carter Bldg.
- Lansing.**—Seager, James B., Genl. Mgr., Seager Eng. Wks.
 Thomas, Horace T., Ch. Engr., Reo Motor Car Co.
- Marquette.**—Olmsted, George C. (Junior), Supt., Lake Shore Eng. Wks.
- Muskegon.**—Albert, Otto, Ch. Draftsman, Shaw Elec. Crane Co.
 Bates, Albert Henry (Junior), Asst. Ch. Draftsman, Shaw Elec. Crane Co.
 Sawyer, Harry, Cons. Engr., Shaw Elec. Crane Co.
 Young, John T., Pres. and Genl. Mgr., Muskegon Traction & Light Co.
- Painesdale.**—Rankin, William A., Elec. Engr., Copper Range Consldt. Co.
- Pontiac.**—Myers, Cornelius T., Ch. Engr., Genl. Motors Truck Co.
- Port Huron.**—Kern, Fred Herbert (Junior), Ch. Engr., C. Kern Brewing Co.
 Weber, O. L. E., Mgr., Mich. Sulphite Fibre Co.
- Saginaw.**—Adams, Thomas D. (Junior), Werner & Pfleiderer; also, Westport, Conn.
 Fisher, Elbert C. (Junior), V. P. and Genl. Mgr., Wickes Boiler Co.
 Willcox, George Bingham, Pres. and Genl. Mgr., Willcox Engrg. Co., Willcox Engrg. Co. Bldg.
- Sibley.**—Church, Austin (Junior), Pres., Church-Field Motor Co.
- Three Rivers.**—Keith, Robert R., Asst. Supt., Sheffield Car Co.
- Vulcan.**—Armstrong, Frank Hall, Mech. Engr., Penn Iron Min. Co., Republic Iron Co.
- Wyandotte.**—Orcutt, Guy Hall (Junior), Elec. Engr., Mich. Alkali Co.

MINNESOTA

- Duluth.**—Fuller, Floid M. (Junior), Cons. Engr., 812-814 Torrey Bldg.
 Hugo, T. W., Cons. Engr., 221 W. 6th Ave.

MINNESOTA, Duluth (Continued).

McGiffert, John Rutherford, Secy. and Treas., Clyde Iron Wks., 29th Ave., W., and Michigan St.

Rumsey, Spencer S., Ch. Engr., Oliver Iron Min. Co., 713 Wolvin Bldg.

Ryerson, William N., Genl. Mgr., Great No. Power Co.

Wessinger, Henry J., Pres., Imperial Iron Wks.

Minneapolis.—Brezinsky, Emil, Allis-Chalmers Co., 102 Corn Exch.

Brown, Edwin Hacker (Junior), Member of Firm, Hewitt & Brown, Archs. and Engrs., 716 Fourth Ave., S.

Craig, Robert, Mgr., Power Equip. Co., 212-218 Third Ave., N.

Flather, John J., Prof. Mech. Engrg., Univ. of Minn.

Garbett, Benjamin C., Charge of Office, and Asst. Supt. of Shop, Garbett & Schneider.

Herrick, Carl Albert, Cons. Engr., 3816 Thomas Ave., S.

Kavanaugh, Wm. H., Exper. Engrg., Univ. of Minn.

Lang, Charles Arthur (Junior), Supt., The Northwestern Consld. Milling Co.

Mayhew, Ray, Asst. Mech. Engr. in Charge Mech. Dept., Minneapolis Steel & Mchy. Co., 2854 Minnehaha Ave.

Pillsbury, Charles Lucien, Mech. and Elec. Cons. Engr., 805 Metropolitan Life Bldg.

Record, James L., Pres. and Genl. Mgr., Minneapolis Steel & Mchy. Co.

Rowley, Frank B. (Junior), Instr. Engrg. Drawing and Descriptive Geometry, Univ. of Minn.

Stacy, Elmer Neill, Designing and Genl. Mech. Engrg., 3216 Hennepin Ave.

Staupe, Edwin G. (Junior), Pres. and Managing Dir., E. G. Staupe Mfg. Co., 526 Fifth St., S.

Teach, Jacob Arthur, Checker and Designer, Minneapolis Steel & Mchy. Co.

Williams, Wilbur S. (Junior), Mech. Engr., The Wabash Screen Door Co., 2222 Elm St., S. E.

St. Paul.—Brink, Harry Le Roy, First Asst. to Ch. Engr., Am. Hoist & Derrick Co.

Crosby, Oliver, Pres. and Engr., Am. Hoist & Derrick Co.

Doty, Paul, V. P. and Genl. Mgr., St. Paul Gas Light Co.

Heinen, Emil Jennings, 707 Commerce Bldg.

Johnson, Edward E., Mfr. Well Screens, 2304 Long Ave.

Toltz, Max, 1614 Pioneer Press Bldg.

Tubby, Charles Walter, Dist. Mgr., Internatl. Steam Pump Co., 703 Commerce Bldg.

Wilhelm, Edward A., Ch. Draftsman, Am. Hoist & Derrick Co.

MISSISSIPPI

Agricultural College.—Carpenter, Randle Churchill, Prof. Mech. Engrg., Supt. Power Plant, Miss. Agri. and Mech. College.

Canton.—Sharp, John Thomas, Jr. (Junior), Supt., Canton Elec. Light & Water Wks.

Magnolia.—Kramer, Xavier A., Cons. Engr. and Arch.

MISSOURI

Bonne Terre.—Zach, Louis Morris (Junior), Constr. Dept., St. Joseph Lead Co.

MISSOURI (Continued).

Columbia.—Fessenden, Edwin Allan (Junior), Assoc. Prof. Mech. Engrg., Univ. of Mo.

Hibbard, H. Wade, Prof. Mech. Engrg., Univ. of Mo., 1307 Kaiser Ave.

Kansas City.—Bendit, Louis, Mgr., Hope Engrg. & Supply Co., 626-627 N. Y. Life Bldg.

Blakeslee, Frank Arthur, 1233 Prospect Ave.

Brady, Joseph H., Ch. Engr., Bd. of Ed., Room J, Pub. Library Bldg., Ninth and Locust Sts.

Clarke, Leon L., Elec. and Mech. Engr., Waddell & Harrington, 1012 Baltimore Ave.

Cushman, Frank, Jr. (Junior), Vice-Prin., Manual Training H. S.

Downes, Nate Worswic (Junior), Ch. Draftsman, J. H. Brady, Cons. Engr. and Ch. Engr., Kansas City Sch. Dist.

Fast, Jacob J., Designer of Mch'y. for Movable Bridges, Waddell & Harrington, 1012 Baltimore Ave.

Field, Freeman, V. P. and Treas., Sheffield Gas Power Co.

Harrington, John L., Waddell & Harrington, Orear-Leslie Bldg.

Hatman, Julius G. (Junior), Cons. Engr., Hatman & Godfrey, 211 Midland Bldg.

Hem, H. O., V. P. and Supt., H. N. Strait Mfg. Co.

Hunt, Leigh A., Pres., Hunt Engrg. Co., 1104 Commerce Bldg.

Hurlburt, Alfred, Engr., Kansas City Gas Co., 910 Grand Ave.

Kent, James M., Elec. and Mech. Engr., Instr. Applied Steam and Elec., Manual Training H. S.

McCarthy, Richard J., V. P., Kansas City So. Ry. Co., Thayer Bldg.

Mann, Harvey Blaine (Junior), 717 Finance Bldg.

Muhlfield, John E., V. P. and Genl. Mgr., Kansas City So. Ry.

Rollins, William Benjamin, Cons. Engr., Rollins & Westover, 420 Midland Bldg.

Struckmann, Holger, Ch. Engr. and Genl. Mgr., Iola Portland Cement Co., 817 Commercial Bldg.

Van Cleve, Horatio Phillips (Junior), Mech. Engr., Waddell & Harrington.

Overland, St. Louis Co.—Vick, Augustas Theodore, Elec. and Mech. Engr.

St. Joseph.—Billings, Edward J. (Junior), Supt. of Power, St. Joseph Ry., Light, Heat & Power Co.

St. Louis.—Allen, George L., Jr. (Junior), 26 Westmoreland Pl.

Ashton, Walter S., Ch. Engr., St. Louis Brewing Asso.

Ball, Philip De Catesby, Mfr., 3003 N. Broadway.

Bausch, Frederick E., Mgr., The Hooven, Owens, Rentschler Co., 1216-1217 Chemical Bldg.

Berger, Franz Alfred, Asst. Prof. Mech. Engrg., Washington Univ.

Blair, William Richard, Wks. Mgr., Landis Mch. Co.

Boughton, Judson H., Pres., Natl. Light & Power Co., Pierce Bldg.

Day, Leonard A., Mech. Engr., Charge Constr. Dept., St. Louis Water Dept.

Dillon, Edward L., Mech. Engr., Fairbanks, Morse & Co.

Einstein, Alfred Charles, First V. P. and Genl. Mgr., Union Elec. Light & Power Co., and Pres. and Genl. Mgr., St. Louis

MISSOURI, St. Louis (Continued).

- County Gas & Elec. Co.'s and Suburban Elec. Light & Power Co., 12th and Locust Sts.
- Flad, Edward, Cons. Engr., Fullerton Bldg.
- Foller, Chas. S., West. Sales Mgr., Union Spring & Mfg. Co., 1322 Central Natl. Bank Bldg.
- Fuchs, Herman, Mgr., Mexican Dept., Fairbanks, Morse & Co., 801 Clark Ave.
- Gazzam, Joseph P., 5027 Westminster Pl.
- Gildehaus, Richard, Jr. (Junior), Supt. of Constr., Mech. and Elec. Equip., Anheuser-Busch; also, Dallas, Tex.
- Harrison, Edwin S. (Junior), Curtis & Co. Mfg. Co., Wellston P. O.
- Higdon, John C., Mech. Engr. and Atty-at-Law, Spec. Pat. and Trade Mark Causes, 605 Central Natl. Bank Bldg.
- Holman, M. L., Cons. Engr., Holman & Laird, Chemical Bldg.
- Howell, Arthur Kemp (Junior), Sales Dept., Henry R. Worthington, 605 Chemical Bldg.
- Hugo, Victor (Junior), Mgr., Hartford Steam Boiler Inspec. & Ins. Co., 614 Security Bldg.
- Hunter, John, Ch. Engr., Union Elec. Light & Power Co.
- Jewett, Frank N., Sales Mgr., Wagner Elec. Mfg. Co., 6400 Plymouth Ave.
- Kenyon, Alfred Lewis, 1105 Chemical Bldg.
- Kupferle, Edward, Pres., Kupferle Bros. Mfg. Co., 600 N. 2d St.
- Laird, John A., Cons. Engr., Holman & Laird, 1324 Chemical Bldg.
- McDevitt, Frank J. (Junior), Dist. Mgr., Elliott Co., and Liberty Mfg. Co. of Pittsburgh, Pa., 351 Pierce Bldg.
- MacGill, Charles Frederick, Supt., Busch-Sulzer Bros.-Diesel Eng. Co., Second and Utah Sts.; also, St. Paul, Minn.
- Meinholtz, Herman Chas., V. P. and Supt., Heine Safety Boiler Co., 2449 E. Marcus Ave.
- Miller, John Fisher Garr, Engrg. Salesman and Mgr. St. Louis Office, Am. Blower Co., Title Guaranty Bldg.
- Morrison, Herbert H., Mech. Engr., 204 Bd. of Ed. Bldg.
- Nordmeyer, Louis C. (Junior), Secy. and Treas., Tait-Nordmeyer Engrg. Co., 1214 Liggett Bldg.
- Ohle, Ernest L., Prof. Mech. Engrg., Washington Univ.
- O'Neill, John Francis, Pres., Fulton Iron Wks., Second and Carr Sts.
- Peek, George Meredith, Mech. Engr. Constr. Dept., Water Wks., 34 E. Grand Ave.
- Peterson, Carl H., Southwestern Rep., The Baldwin Loco. Wks. and Stand. Steel Wks. Co., 1612-1614 Wright Bldg.
- Potter, Wm. Bleecker, Mgr. and Ch. Engr., St. Louis Sampling & Testing Wks., 713 Clark Ave.
- Rosing, William H. V., Asst. to V. P., St. L. & S. F. R. R., Frisco Bldg.
- Rotter, Max, Ch. Engr., Busch-Sulzer Bros.-Diesel Eng. Co., South Side Bank Bldg.
- St. Clair, James Thorpe (Junior), Pres., Wesley Mfg. Co., 314 S. 8th St.
- Schadek, Edward William, Ch. Engr., The Ruemmeli-Dawley Mfg. Co., 3900 Chouteau Ave.

MISSOURI, St. Louis (Continued).

- Schlatter, Rudolf, Asst. to Ch. Engr., Busch-Sulzer Bros.-Diesel Eng. Co.
 Setz, Hans Rudolph, Ch. Engr., Fulton Iron Wks.
 Tait, Roderick H., Pres., Tait-Nordmeyer Engrg. Co., 1214 Liggett Bldg.
 Tenney, Edward Henry, Asst. to Ch. Engr. of Power Plants, Union Elec. Light & Power Co., 12th and Locust Sts.
 Terrell, Cary D. (Junior), Sales Agt., Am. Car & Fdy. Co., 915 Olive St.
 Wadleigh, George R., Engr., Bemis Bros. Bag Co., 1601 S. 4th St.
 Wallace, Erwin Van Doren (Junior), Teacher Mech. Drawing, Manual Training and Mathematics, Central High Sch.
 Washington, Dixon E., Ch. Engr. and Mgr., Packers Architectural & Engrg. Co., 1321 Wright Bldg.
 Westlake, Charles Thomas, Ch. Mech. Engr., Commonwealth Steel Co., 1629 Pierce Bldg.
 Wolff, Herbert Wm. (Junior), Asst. to V. P., Am. Car & Fdy. Co., 1510 Syndicate Trust Bldg.
- Springfield.**—Guckel, Charles Henry (Junior), Genl. Mgr., Springfield Gas & Elec. Co., and Springfield Traction Co., 2 Woodruff Bldg.
- Webster Groves.**—Matlack, Ellwood V., 415 Bompert Rd.
 Moore, Stanley H., Arch. and Engr., Forest and Selma Ave.

MONTANA

- Anaconda.**—Garred, Ulysses A., Mech. Supt., Anaconda Copper Min. Co.
Butte.—Charles, Alfred Wm., Ch. Draftsman, Anaconda Copper Min. Co., P. O. Box 1375.
 Nordberg, Carl Victor, Rep., Nordberg Mfg. Co., Electric Bldg.
Great Falls.—Klepinger, John Henry, Asst. Supt. B. and M. Reduction Dept., Anaconda Copper Min. Co.
Hysham.—Buckingham, Henry H. (Junior).
Missoula.—Cunningham, George H. (Junior), Asst. Prof. Mech. Engrg., Univ. of Mont.
 Richter, Arthur Wm. (Junior), Univ. of Mont.

NEBRASKA

- Lincoln.**—Chase, Leon Wilson, Head Prof. Agri. Engrg., Univ. of Neb., Univ. Farm.
 Chowins, Chas. E., Supt. of Bldgs., Grounds and Constr., Univ. of Neb.
 Hoffman, James David, Prof. Mech. Engrg. and Practical Mechanics, Univ. of Neb., Sta. A.
- Omaha.**—Harriman, Norman Follett, Chem. and Engr. of Tests, Union Pac. Lab.
 McKeen, Wm. R., Jr., Pres. and Genl. Mgr., McKeen Motor Car Co.
 Meyer, C. Louis (Junior), Mgr., Concrete Engrg. Co., Omaha Natl. Bank Bldg.
 Parsons, Harry Noble (Junior), Spec. Apprentice, McKeen Motor Car Co.

NEVADA

- Las Vegas.**—Wilcox, Wallace J., Supt. M. P., Las Vegas & Tonapah R. R.; also, Los Angeles, Cal.
McGill.—Duncan, Lindsay, Mech. Engr., Steptoe Valley Smelting & Min. Co.
 Waddell, George F., Supt. of Concentrator, Steptoe Valley Smelting & Min. Co.

NEW HAMPSHIRE

- Alton.**—Clough, Wm. R., Prop., Rockwell Clough Co.
Claremont.—Bateman, George Wm. (Junior), Asst. to Secy. and Wks. Mgr., Sullivan Mchy. Co.
 Fry, Thomas W., Secy. and Wks. Mgr., Sullivan Mchy. Co.
 Holdsworth, Fred Dean, Mech. Engr., Sullivan Mchy. Co.
Concord.—Lauder, George B. (Junior), Cons. Elec. Engr.
Durham.—Cardullo, Forrest Ellwood, Prof. Mech. Engrg., N. H. College.
 Laton, Thomas J. (Junior), Instr. in Drawing, N. H. College.
Hanover.—Cummings, Wm. Warren, Cons. and Contr. Engr.
Hooksett.—Bourne, Stephen N., Agt., Dundee Mills.
Laconia.—Gerry, Arthur Peterson (Junior), Mech. Engr., Laconia Car Co.
Lisbon.—Hall, Carl Albe (Junior), Mech. Engr., Dir., Parker & Young Co.
Manchester.—Diman, Walter G., Supv. Engr., Amoskeag Mfg. Co.
 Manning, Chas. Henry, Ch. Engr., U. S. Navy, Ret., Genl. Supt., Amoskeag Mfg. Co.
 White, Arthur M., Supt., Am. Loco. Co.

NEW JERSEY

- Ampere.**—Warder, Walter J., Jr., Wks. Mgr., Crocker-Wheeler Co.
 Wheeler, Schuyler Skaats, Pres., Crocker-Wheeler Co.
 Wiley, James M. (Junior).
Bayonne.—Conrad, Ernest B., Supt., Elec. Launch Co.
 Edwards, Samuel H., Genl. Supt., Tide Water Oil Co.
 Gray, John Lathrop, Asst. Genl. Supt., Tide Water Oil Co., E. 22d St.
 Harter, Isaac, Jr., Babcock & Wilcox Co.
 Inslee, Heber Clyde, Engr. on Plant Work, Babcock & Wilcox Co.
 Mauger, David Napier (Junior), Babcock & Wilcox Co.
 Sawyer, Luke Eugene (Junior), Apprentice, Babcock & Wilcox Co.
 Smith, Augustus, Pres., Bergen Point Iron Wks., foot of W. 5th St.
 Sneddon, James P., Genl. Supt., Babcock & Wilcox Co.
 Treat, Sidney Wellington (Junior), Mech. Engr., Babcock & Wilcox Boiler Co.
 Zachert, Arthur Robert (Junior), Ch. of Production Dept., Babcock & Wilcox Co., Bayonne Plant.
Bloomfield.—Baylis, Robt. Nelson, Pres. and Engr., The Baylis Co.
 Church, Herbert B. (Junior), Supt., Consld. Safety Pin Co.

NEW JERSEY, Bloomfield (Continued).

Henderson, Robert Halsey, Mgr. of Wks., Westinghouse Lamp Co.

Libby, Sam H., Engr. Hoist Dept., Sprague Elec. Wks.

Muller, Paul, Ch. Draftsman, Sprague Elec. Wks. of Genl. Elec. Co.

Bound Brook.—Ball, Frank H., V. P. and Genl. Mgr., Am. Eng. Co.

Ball, Frederick Ossian, Asst. Genl. Mgr., Am. Eng. Co.

Bridgeton.—Janvier, Henry Archer, Asst. Mech. Engr., Ferracute Mch. Co.

Smith, Oberlin, Pres., Ferracute Mch. Co.

Burlington.—Conard, Wm. R., Inspc. Engr., Savings Institution Bldg.

Camden.—Dickie, George W., Marine Engr. and Naval Arch., N. Y. Shipbuilding Co.

Harman, William Henry, Mech. Engr., Camden Iron Wks.

Kauffmann, Frederick F., Asst. to Ch. Engr., N. Y. Shipbuilding Co.

MacLeod, Daniel T., Asst. Engr., Am. Coke & Gas Constr. Co., Second and Cherry Sts.

Magoun, Henry A., V. P., N. Y. Shipbuilding Co.

Matton, Fred V., Mech. Engr., Camden Iron Wks.

May, De Courcy, Chairman, N. Y. Shipbuilding Co.

Middleton, Albert C., Secy., Victor Talking Mch. Co.

Miller, F. Joseph (Junior), Asst. Engr., Warren Webster & Co.

Moore, Edwin A., Pres., Am. Coke & Gas Constr. Co., P. O. Box 351, Second and Cherry Sts.

Murray, Henry H., Mech. Engr., Victor Talking Mch. Co.

Webster, Warren, Pres., Warren Webster & Co., Point and Pearl Sts.

Carteret.—Arnold, Anthony Brown, Dist. Engr., The Am. Agri. Chem. Co.

Best, William John, Treas., Wheeler Condenser & Engrg. Co.

Brown, John J., V. P. and Genl. Mgr., Wheeler Condenser & Engrg. Co.

Christie, E. W., Mech. Engr., Wheeler Condenser & Engrg. Co.

Chrome.—Addicks, Lawrence, Supt., U. S. Metals Refining Co.

Deacon, Ralph Woolman, Asst. Supt., U. S. Metals Refining Co.

East Newark.—Horstmann, Henry J., Mech. Engr., The F. W. Horstmann Co., 408-410 John St.

East Orange.—Barr, Harry P. (Junior), 157 N. Walnut St.

Gillies, Wm. F. (Junior), 172 Central Ave.

Mueller, Victor H. (Junior), 25 Maple Terrace.

Newton, Lewis W., 18 N. 17th St.

Reimer, Arthur Adams, Engr. Water Dept., City Hall.

Elizabeth.—Briggs, William C., 133 Elm St.

Holt, Frank Eugene, Ch. Engr., Singer Mfg. Co.

Miller, Lebbeus B., 1025 E. Jersey St.

Moore, Samuel L., V. P. and Genl. Mgr., The Moore Bros. Co.

Osterman, Philip Campbell, Asst. Supt., Am. Gas Furnace Co.

Rose, Harry Mulford, 279 N. Broad St.

Garwood.—Tuttle, Willard S., Pres., Garwood Bronze & Iron Wks.

Hackensack.—Boyd, John T., 231 Polify Rd.

NEW JERSEY (Continued).

Harrison.—Borchardt, Albert Hugo (Junior), Engr., Henry R. Worthington Hyd. Wks.

Cory, George Janeway, Jr. (Junior), Inspr., Henry R. Worthington Hyd. Wks.

Davis, Edwin Halsted (Junior), Engr., Henry R. Worthington. de Laval, Carl Geo., Genl. Mgr., Henry R. Worthington.

Diepenbrock, Joseph F., Ch. Engr., Henry R. Worthington Hyd. Wks.

Dorer, Oscar H. (Junior), Testing Dept., Henry R. Worthington Hyd. Wks.

Lapat, Leopold (Junior), Erecting Engr., Henry R. Worthington.

Nickel, Frank F., Engr., Henry R. Worthington.

Powers, Alexander Merrell (Junior), Testing Hyd. Mchy., Henry R. Worthington.

Prince, Walter F., Supt. Fdy. Dept., Henry R. Worthington.

Shriver, Harry T. (Junior), Prop., T. Shriver & Co.

Stewart, Charles Alexander, Jr. (Junior), Genl. Elec. Co.

High Bridge.—Alexander, Edward E., Ch. Draftsman, The Taylor-Wharton Iron & Steel Co.

Bench, Alfred Rittscher (Junior), The Taylor-Wharton Iron & Steel Co.

Cope, Robert Harper (Junior), Secy. to Pres., Taylor-Wharton Iron & Steel Co.

Hoboken.—Charavay, Marius A. (Junior), Instr. Exper. Engrg., Stevens Inst. of Tech.

Denton, James E., Emeritus Prof. Engrg. Practice, Stevens Inst. of Tech.

Fletcher, Andrew, Pres. and Treas., W. & A. Fletcher Co.

Fletcher, W. H., V. P., W. & A. Fletcher Co., North River, I. W., Hudson St., 12th to 14th Sts.

Funk, Nelson E., Cons. Engr., Pres. and Mgr., Funk Mch. Co., 1401 Clinton St.

Furman, Franklin De R., Prof. Mechanism and Mch. Design, Stevens Inst. of Tech.; also, New York, N. Y.

Ganz, Albert Frederick, Prof. Elec. Engrg., Stevens Inst. of Tech.

Gunther, Charles O., Prof. Mathematics, Stevens Inst. of Tech., and Cons. Engr., Alphons-Custodis Chimney Constr. Co., 95 Nassau St., New York, N. Y.

Humphreys, Alex. C., Pres., Stevens Inst. of Tech.; also Pres., Buffalo Gas Co., and Pres., Humphreys & Miller, Inc., 165 Broadway, New York, N. Y.

Martin, Louis Adolph, Jr., Prof. Mechanics and Dean of Junior Class, Stevens Inst. of Tech.

Pryor, Frederick L., Prof. Exper. Engrg., Stevens Inst. of Tech.

Riesenberger, Adam, Registrar and Treas., Stevens Inst. of Tech.

Sievers, Ernest John Joseph (Junior), Cadet Engr. Hudson Div., Pub. Service Elec. Co.

Stanton, Francis A. O'C. (Junior), City Engr., 1104 Bloomfield St.; also, New York, N. Y.

Stevens, E. A., Pres., Hoboken Land & Improvement Co., 1 Newark St., and Rd. Comr., State of N. J., State House, Trenton.

NEW JERSEY, Hoboken (Continued).

- Van Patten, William Ensign, Superintending Power and Light Plants, M. & E. Div., D. L. & W. R. R.
- Jersey City.**—Alsberg, Julius (Junior), Engr., Colgate & Co.
 Benton, Morris F., Mech. Engr., 300 Communipaw Ave.
 Craig, James, Mech. Engr., 807-841 Garfield Ave.
 Davey, Warren (Junior), Ch. Engr., Colgate & Co., 105 Hudson St.
 Ducommun, Edwd., Asst. Ch. Engr., Am. Sugar Refining Co.
 Gardner, G. Clinton, Jr., Genl. Foreman M. P., Manhattan Div., Pa. R. R.
 Hagar, Arthur Percy, Engr. Marine Dept., Safety Car Htg. & Ltg. Co., 206 Erie St.
 Johnson, F. Amos, Cons. Mech. Engr. and Pat. Atty., 22 Morris St.
 Krause, Arthur E., Struc. and Mech. Engrg., 345 Fairmount Ave.
 Lindstrom, Nils Oscar, Supt., A. B. See Elec. Elev. Co., Pacific Ave. and Forest St.
 Rink, George William, Mech. Engr. M. P. Dept., Central R. R. of N. J.
 Snyder, Leo H. (Junior), Joseph Dixon Crucible Co.
 Tompkins, Samuel D., Pres., Smooth-on Mfg. Co., 572 Communipaw Ave.
- Kearny.**—Chapman, George, Draftsman, Nairn Linoleum Co.
- Lodi.**—Boettger, Robert, Secy., United Piece Dye Wks.
 Jurgensen, Jess Christian, United Piece Dye Wks.
- Madison.**—Breckenridge, C. E., 17 Fairview Ave.
 Van Voorhis, Frederick Springer (Junior), 19 Maple Ave.
- Mahwah, Bergen Co.**—Sargent, Fitz-William, Ch. Engr., Am. Brake Shoe & Fdy. Co., Box 15.
- Maurer.**—Updegraff, William Barrett, Architectural Tile & Faience Co.
- Millville.**—Bigelow, Charles H., Ch. Mech. Engr., Millville Mfg. Co.
- Montclair.**—Kent, William, 49 Union St.
 Pratt, Charles Richardson, Cons. Engr., 39 Gates Ave.; also, London, England.
- New Brunswick.**—Heck, Robert C. H., Prof. Mech. Engrg., Rutgers College.
- New Lisbon.**—White, Joseph J., Pres., Joseph J. White, Inc.
- Newark.**—Abercrombie, James Henderson, Mech. Supt., Clark Thread Co., Clark and Ogden Sts.
 Betts, Philander, Ch. Engr., Bd. of Public Utility Commissioners, State of N. J., 412 Scheuer Bldg.
 Burleigh, Wm. F., Genl. Supt., Murphy Varnish Co.
 Campbell, Geo. Watts, Mech. Engr. and Mill Arch., 171 Broad St.
 Carle, Nathaniel A., Ch. Engr., Pub. Service Elec. Co.
 Core, W. Wallace (Junior), 165 Sherman Ave.
 Eberhardt, Frank Edward (Junior), V. P. and Treas., Newark Gear Cutting Mch. Co., 69 Prospect St.
 Eberhardt, Frederick L., Pres. and Genl. Mgr., Gould & Eberhardt.
 Eberhardt, Henry J., Secy. and Designer, Newark Gear Cutting Mch. Co., 69 Prospect St.

NEW JERSEY, Newark (Continued).

Ellis, Halcolm, Genl. Mgr., Ellis Adding-Typewriter Co. Elizabeth and Hawthorne Aves.

Faber Du Faur, Adolph, 58 Seymour Ave.

Farrand, Dudley, Genl. Mgr., Pub. Service Elec. Co., 759 Broad St.

Foster, John Melville, Pres. and Genl. Mgr., Foster Engrg. Co., 109 Monroe St.

Gamon, Ernest E. (Junior), V. P. and Genl. Mgr., Gamon Meter Co., 282 South St.

Harrington, Harry Garfield, 39 Pacific St.

Jones, Daniel Lanning (Junior), Buyer and Asst. Factory Mgr., Chas. R. De Bevoise Co., Plane and Academy Sts.

Klockars, Charles Oscar, Supt., Essex Fdy., Murray St. and Ave. D.

Loutrel, Cyrus Henry (Junior), Asst. Factory Mgr., Natl. Lock Washer Co.

Marot, Edward H. (Junior), Sales Engr., Hyatt Roller Bearing Co.; also, Philadelphia, Pa.

Martin, Frank M., Asst. Wks. Supt., The Celluloid Co., 290 Ferry St.

Northrup, Francis B. (Junior), Mech. Engr., The Charles Burroughs Co.

O'Keeffe, James G. (Junior), Supt. Wks., Pub. Service Gas Co., 35 Front St.

Owen, James, Cons. Engr., 196 Market St.

Phelps, Frederick Augustus, Mech. Engr. and Mill Arch., Union Bldg., 9-15 Clinton St.

Phillips, Franklin, Pres., Hewes & Phillips Iron Wks., 8 Orange St.

Read, George Franklin, Jr., Asst. Mech. Supt., Clark Thread Co., Clark and Ogden Sts.

Richardson, George Partridge (Junior), Mech. Engr., Engr. of Constr., Isbell-Porter Co., 46 Bridge St.

Roberts, George J., First V. P., Pub. Service Corp. of N. J., Pub. Service Corp. Bldg.

Runyon, Frederick O., Cons. Engr., 122 Market St.

Taylor, Percy B., Cons. Engr., 196 Market St.

Tremaine, E. G., Automatic Weighing Mch. Co., 136 Commerce St.

Weston, Edward, Pres., Weston Elec. Instrument Co., Waverly Park.

Wilson, James Edward, M. M., Natl. Lock Washer Co.

Yerzley, William Alfred, Secy. and Engr., Nagle Re-Blade Knife Co.

Zimmermann, William Frederick (Junior), Ch. Draftsman and Designer, Gould & Eberhardt.

Orange.—Bachman, Robert A., V. P. and Genl. Mgr., Edison Storage Battery Co.

Briggs, Leroy Edmund (Junior), Thomas A. Edison Lab.

Durand, Nelson C., Second V. P., Thomas A. Edison, Inc.

Hutchison, Miller Reese, Ch. Engr., Edison Lab., Thos. A. Edison, Inc.

Phelps, Charles C. (Junior), Adv. Dept., Edison Storage Battery Co.

NEW JERSEY (Continued).

- Passaic.**—Appleton, Henry W. (Junior), Mech. Supt., Passaic Print Wks.
 Bryant, F. J., M. M., Andrew McLean Co., 4th and Virginia Sts.
 Ernst, Alfred F. (Junior), M. M., Brighton Mills.
 Lyall, Wm. L., Treas., Brighton Mills.
 Rohlig, George Gustav, Dir. and Genl. Supt., Botany Worsted Mills.
 Scheel, Henry V. R. (Junior), Brighton Mills.
 Schlachter, Carl H., Supt. Engr., Botany Worsted Mills.
 Sedgwick, E. H. (Junior), Pur. Agt., Brighton Mills.
 Stephenson, Hermann (Junior), Brighton Mills.
 Thornley, Fred Curtis, Genl. Supt., Robins Conveying Belt Co.
 Uehling, Edward A., Pres., Uehling Instrument Co., Delaware Ave.
- Paterson.**—Ackerman, Wm. S., Cons. Engr., 704 Colt Bldg.
 Brock, William M., Supt. Elec. Dept., Pub. Service, Edison Sta.
 Christie, Wm. Wallace, Cons. Engr., Citizens' Trust Co. Bldg.; also, New York, N. Y.
 Cooke, Fred W., 384 Broadway.
 Ferguson, J. W., Engr. and Bldg. Contr., 152 Market St.; also, New York, N. Y.
 Hughes, Robert G., Secy. and Mech. Engr., John W. Ferguson Co.
 Milson, Thomas H., 528 E. 29th St.
 Royle, Vernon, Pres. and Treas., John Royle & Sons.
 Royle, Vernon Elmer (Junior), Mech. Engr., John Royle & Sons.
 Wilder, Sylvanus Wells (Junior), Supt., Dolphin Jute Mills.
- Pequannock.**—Benson, Orville.
- Perth Amboy.**—Antisell, Frank Linden, Asst. Supt., Raritan Copper Wks.
 Balz, George Adam (Junior), Asst. Genl. Mgr., Didier-March Co., P. O. Box 327.
 Colwell, James V. V., Didier-March Co.
 Moore, Levin A., Ch. Engr., Roessler & Hasslacher Chem. Co.
- Phillipsburg.**—Almquist, Karl, Ch. Draftsman, A. S. Cameron Steam Pump Wks.
 Prellwitz, William, Ch. Engr., Ingersoll-Rand Co.
 Raymond, Ward, Asst. Engr., Ingersoll-Rand Co.
 Redfield, Snowden B., Engr. of Tests, Ingersoll-Rand Co.
- Plainfield.**—Gowie, William.
 Greenleaf, Geo. Edward, Mech. Engr., Niles-Bement-Pond Co.
 Hibbard, Henry D., Cons. Engr., 114 E. 7th St.
 Hollingsworth, Samuel, Mech. Engr., 171 E. Front St.
 Hurd, Hobert J., 908 W. 3d St.
 McIntosh, William, 25 Willow Ave.
 MacMurray, James T., Genl. Mgr., Niles-Bement-Pond Co.
 Otto, Henry S. (Junior), Supt. Truck Dept., Saurer Motor Co.; also, New York, N. Y.
 Scribner, Charles W., Mech. Engr., Park Ave.
 Stebbins, Albert C., V. P., Niles-Bement-Pond Co.
- Princeton.**—Davis, Roswell (Junior), Supt. Grounds and Bldgs., Princeton Univ.
 Willson, Frederick Newton, Prof. Descriptive Geometry and Tech. Drawing, Princeton Univ.

NEW JERSEY (Continued).**Rahway.**—Jackson, Walter W., Ch. Draftsman, The Regina Co.**Ridgewood.**—Hofmeyer, Geo. A., Inventor and Mfr.**Roselle.**—Higgins, Campbell Peck, 127 E. 5th Ave.

Moore, Albert B., Treas. and Genl. Mgr., Shedd Elec. Co., Inc.

Moore, Miller F., 145 E. 4th Ave.

Rutherford.—Anderson, Jas. C. (Junior), Cons. and Contr. Engr., 153 Newell Ave.**Silver Lake.**—Saltzman, Auguste L., Supt. Primary Battery Dept., Thomas A. Edison, Inc.**Spring Lake.**—Hayward, H. S., Cons. Engr. Floating Equip., Pa. R. R.**Stewartville.**—Herter, Emil, Mech. Engr., Edison Crusher Co.

Mason, William H. (Junior), Supt., Edison Portland Cement Co.

Trenton.—Bunn, Frank Wilson, care of John A. Roebling's Sons Co.

Harmar, Josiah, 196 W. State St.

Hewitt, Wm., The Trenton Iron Co.

Smith, James W., Mgr., The Trenton Iron Co.

Webber, Sam'l S., Ch. Engr., The Trenton Iron Co.

Watchung.—Herschmann, Arthur J.

Moldenke, Richard, Secy., Am. Foundrymen's Asso.

Weehawken.—Miller, Edwin Ellsworth, Asst. Supt. of Power Plants, Hackensack Water Co.

Sullivan, Howard W. (Junior), Mgr., Union Drydock Co

West Orange.—Edison, Thos. A., Inventor.**NEW MEXICO****Albuquerque.**—Huning, Arno E. (Junior), Owner, Arno Huning Elec. Co., 412 W. Central St., and Treas., Albuquerque Floral Co.

Van Deinse, A. F. (Junior), Mgr., Albuquerque Gas, Elec. Light & Power Co.

Hurley.—Bruff, Charles E., Constr. Engr., Chino Copper Co.

Jourdin, Willis Wallace, Ch. Engr. Power Div., Chino Copper Co.

NEW YORK**Albany.**—Blake, Francis E. (Junior), Mech. Engr., State Barge Canal Office, New Lyon Blk.

Caracristi, Virginus Z., Cons. Engr., Del. & Hudson Co.

Cobb, Stephen Prentis, Albany So. R. R.

Cook, John P. (Junior), Asst. Engr., N. Y. C. & H. R. R. R. Co., 32 Albany Sta.

Kelley, Frederick Williams, V. P., Helderburg Cement Co., 100 State St.

McElroy, James Finney, Cons. Engr., Consld. Car Htg. Co., 423 N. Pearl St.

Mack, Geo. J. (Junior), Inspr. of Loco. Boilers, Pub. Service Com.

Sague, James Edward, Commissioner, Pub. Service Com., Second Dist.

Wheeler, Seth, Pres., A. P. W. Paper Co.

Wheeler, Seth, Jr. (Junior), V. P. and Genl. Supt., A. P. W. Paper Co.

NEW YORK (Continued).

Astoria, L. I.—Hodgson, Alec Wilberforce, M. M., Astoria Light, Heat & Power Co.

Auburn.—Cooke, Harte, Mech. Engr., McIntosh & Seymour Co.
Dyer, Robert A., Jr., Asst. Genl. Mgr., Rochester, Syracuse & East. R. R. Co.

Fowler, Wallace Sherman (Junior), Draftsman, McIntosh & Seymour Co.

McIntosh, John E.

Seymour, James Alward, Pres., McIntosh & Seymour Co.

Averill Park.—Horton, Charles M. (Junior).

Baldwinsville.—Lager, Carl Axel (Junior), Supt., Morris Mch. Wks.

Ballston Lake.—Nettleton, William Alpheus.

Bellport, Long Island.—Vose, Clarence.

Belmont.—Reid, Joseph Snively, Secy., Ch. Engr., Clark Bros. Co.; also, Olean.

Binghamton.—Cobb, Geo. H., Genl. Mgr., N. Y. Transit Co., 802 Kilmer Bldg.

Conlee, George D. (Junior), Supt., Binghamton Gas Wks., 40 Chenango St.

Harris, Job Frederic Wilson, Cons. Engr., 21 Goethe St.

Brooklyn.—Abbott, Frederick Bancroft, 419 Ninth St.

Ackerman, Frank (Junior), Internatl. Motor Co., 532 Atlantic Ave.

Adler, Alphonse A., Instr. Mech. Drawing and Designing, Poly. Inst. of Brooklyn, 85 Livingston St.

Aiken, Charles W., Secy. and Treas., Houchin-Aiken Co., 113-123 53d St.

Boenig, Robert W., Engr. in Charge, Nichols Copper Co., Bor. of Queens.

Booraem, J. Van Voorst, Cons. Engr., 204 Lincoln Pl.

Brinton, Willard Cope, Mech. Engr., Bush Terminal Co., 43d St.

Bunker, Raymond U. (Junior), Second Asst. Supt., Arbuckle Bros. Refinery, foot of Pearl St.

Chalmers, John Brown (Junior), Instr., Pratt Inst.

Chute, James Potter, Supt. Floating Equip., Jay Street Terminal.

Clark, Howard B., East. Rep., The McNaul-Boiler Mfg. Co. of Toledo, O., 50 Lefferts Pl.

Corbett, Chas. H., V. P., The Continental Iron Wks.

Covell, Harry N., Supt., Lidgerwood Mfg. Co., Dikeman St.

Crawley, George E. (Junior), Waterbury Co., Waterbury and Ten Eyck Sts.

Davidson, Marshall T., Pres., M. T. Davidson Co., 43-53 Keap St.

Deming, Wm. H., Mech. Engr., Continental Iron Wks.

Dobson, W. J. M., Cons. Mech. Engr., 398 Adelphi St.

Doughty, George A., Secy., Logan Iron Wks., 52 Commercial St.

Drewett, Wm. A., Supt., M. T. Davidson Co., 43-53 Keap St.

Engel, Godfrey, Constr. Engr., Am. Sugar Refining Co. of N. Y., foot of S. 4th St.

Engel, Louis G., Hotel Bossert, Montague & Hicks St.

Ennis, William Duane, Prof. Mech. Engrg., Poly. Inst. of Brooklyn.

NEW YORK, Brooklyn (Continued).

- Ferguson, Geo. R., Asst. Engr., Dept. of Bridges, 179 Washington St.
- Ferguson, Milford B., Supt., Thos. F. Condon & Co., Bush Terminal.
- Fladd, Frederick C., Traveling and Cons. Engr., E. W. Bliss Co., 17 Adams St.; also, New Canaan, Conn.
- Flinn, Thomas F., Mech. Engr., 72 Second Pl.
- Gabriel, Charles R., Cons. and Designing Engr., E. W. Bliss Co.
- Gerhard, Dr. William Paul, Cons. Engr. for Hyd. and Sanitary Wks., 39 Strong Pl.
- Greene, David Joy (Junior), Treas., 300 Oakland St.
- Gremple, Charles William, 82 Schermerhorn St.
- Grimm, Paul H., Ch. Engr., Arbuckle Bros., foot of Jay St.
- Grossmann, Albert, Cons. Engr., 112 Marlborough Rd.
- Hackstaff, Frederick William (Junior), Adv. Mgr. and Mgr. Transmission Rope Dept., Am. Mfg. Co., Noble and West Sts.
- Hamilton, James V., Cons. Engr., 682 E. 5th St.
- Hillmann, Gustav, Naval Arch., 470 Greene Ave.
- Houchin, Ernest A., Pres., Houchin-Aiken Co., 35-45 53d St.
- Huff, Slaughter W., 259 Franklin Ave.
- Jewell, Chas. W., Engr., Dept. of Water Supply, Gas and Elec.
- Keller, Joseph F., Mgr., Keller Mech. Engraving Co., Gair Bldg., 70 Washington St.
- Kent, Ellis C., Mech. Engr., Mechanics Bank Bldg.
- Kent, Robert Sayre, Designing, Supvg. and Operating Engr., Mechanics Bank Bldg.
- Knight, Geo. Laurence, Designing Engr., Edison Elec. Ill. Co. of Brooklyn, 360 Pearl St.
- Kottcamp, John Paul (Junior), Instr. in Charge Steam Lab., Pratt Inst.
- Langlotz, Charles, Mech. Supt., Brooklyn Cooperage Co., 142 Kent Ave.
- Langlotz, Robert, 78 Delevan St.
- Larkin, Fred A., 570 Ocean Ave., Flatbush.
- Leavitt, Frank M., Cons. Engr., 133 Plymouth St.
- Lenfest, Bertram A., Mech. Engr., 1524 76th St.
- Lockwood, Rutherford T. (Junior), Asst. Supt., Sone & Fleming Wks., Stand. Oil Co. of N. Y., Kingslands and Meserole Aves.
- Logan, Frank J., V. P. and Treas., Logan Iron Wks., Commercial St.
- Logan, Wm. J., Logan Iron Wks., Commercial and Clay Sts.
- McFarlan, Edward (Junior), 360 Jefferson Ave.
- Maxwell, Max Carson, Head of Dept. Applied Mechanics, Pratt Inst.; also, Cons. Engr., Woolworth Bldg., New York.
- Megirian, Joseph J. (Junior), Mech. Engr., 209 72d St.
- Mesick, D. W., Prop. and Mgr., Fulton Fdy. & Mch. Co., 25 Furman St.
- Milker, Herbert P., Publicity Dir. and Acting Sales Mgr., C. J. Tagliabue Mfg. Co., 32 33d St.
- Moritz, Albert, Comdr., U. S. Navy, Ret., 723 E. 18th St.
- Nash, Lewis H., Mech. Engr., Natl. Meter Co.; also, Pres., Nash Engrg. Co., South Norwalk, Conn.
- Norris, J. H., Mech. Engr., Natl. Meter Co., 4207 First Ave.
- Obert, Casin W., Pres., Atlantic Mch. Co., 963 Atlantic Ave.

NEW YORK, Brooklyn (Continued).

Patton, John H. (Junior), Engr. and M. M., N. Y. Tanning Extract Co., West and Green Sts.

Randall, John Arthur (Junior), Instr. Mechanics and Heat, Pratt Inst.

Rowland, Charles Bradley, V. P., The Continental Iron Wks., Greenpoint.

Rowland, Thos. F., Jr., Pres., The Continental Iron Wks., West and Cayler Sts.

Rowley, Harry William, Mech. Engr., Borough Development Co., 186 Remsen St.

Sabin, Alvah Horton, Cons. Chem., Natl. Lead Co., 129 York St.

Sanborn, Francis Noel (Junior), Mech. Engr., 47 Brevoort Pl.

Scott, J. W., Supt., Arbuckle Bros., foot of Jay St.

Scott, Seaton M., Engr., 55 Hawthorne St.

Slawson, Harry H. (Junior), 345 Eastern Parkway.

Sprong, Severn D., Edison Elec. Illuminating Co. of Brooklyn, 360 Pearl St.

Thoma, Charles, Jr. (Junior), Supt. Die Dept., E. W. Bliss Co.

Thoma, Walter (Junior), Ch. Mech. Inspr., E. W. Bliss Co.

Tibbals, Geo. A., Secy. and Treas., Continental Iron Wks.

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- Ducas, Charles (Junior), Cons. Engr., 30 Church St.
- Duncombe, Frederic H. (Junior), Engr. Min. Dept., Allis-Chalmers Co., 30 Church St.
- Dunn, Gano, Pres., J. G. White Engrg. Corp., 43 Exch. Pl.
- Dyer, Frank L., Pres., Genl. Film Co., 200 Fifth Ave.
- Earll, Chas. Isaac, 11 Broadway.
- Eastment, Wm. H. (Junior), Engr., B. Altman & Co., Fifth Ave. and 34th St.
- Eden, Louis E., Mech. and Advisory Engr. with Cass Gilbert, 11 E. 24th St.
- Ehrmann, Carl (Junior), Sales Engr., 2 Rector St.
- Eilers, Karl Emrich, Am. Smelting & Refining Co., 165 Broadway.
- Ekstrand, Charles, Mech. Engr., Warner Quinlan Asphalt Co., 79 Wall St.
- Emerson, Harrington, Stand. Practice and Efficiency Engr., Rms. 1522-1524 Hudson Terminal Bldg., 30 Church St., and 424 McCormick Bldg., Chicago, Ill.
- Ennis, Herbert Vrooman (Junior), Engrg. Dept., Am. Car & Fdy. Co.
- Ennis, J. B., Designing and Estimating Engr., Am. Loco. Co., 30 Church St.
- Epple, Edward C. (Junior), Engr., Turner Constr. Co., 11 Broadway.
- Erlenkotter, Walter (Junior), Fuel Engrg. Chem., Stand. Testing Lab. of City of N. Y., 127 Franklin St.
- Errington, Franklin A., Cons. Mech. Engr. and Mfr. Mch. Tools, 39 Cortlandt St., and Lab., Stapleton, S. I.
- Erwin, William W., N. Y. Edison Co., 55 Duane St.
- Esselstyn, Horace H., Engr., Westinghouse, Church, Kerr & Co., 10 Bridge St.; also, Detroit, Mich.
- Estabrook, Mansfield (Junior), Niles-Bement-Pond Co., 111 Broadway.
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- Faber, John Pelham (Junior), Westinghouse, Church, Kerr & Co., 10 Bridge St.

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- Faile, E. H. (Junior), Supvg. Engr., Adams Express Bldg. Co., 141 Broadway.
 Falkenau, Arthur, Industrial and Cons. Engr., 165 Broadway.
 Farrington, Thos. H. (Junior), Secy., Treas., Geo. Merritt Ward, Inc., 5-7 E. 42d St.
 Feldman, Abram Meyer, Cons. Engr., 120 Liberty St.
 Fenner, David C., 1764 Broadway.
 Ferguson, Hardy Smith, Cons. Engr., 200 Fifth Ave.
 Fieux, Ernest D. (Junior), Pres. and Treas., L. J. Wing Mfg. Co., 352-362 W. 13th St.
 Fillingham, Myles Percy, Cons. and Contr. Engr., Hudson Terminal Bldg.
 Finch, Ellis Jerome (Junior), 260 W. 136th St.
 Fisher, Wm. Wallace (Junior), Asst. Engr., Royden Marble Mchy. Co., 220 Fifth Ave.
 Fleming, Henry Stuart, Cons. Engr., 1 Broadway.
 Flint, Bertram Pierpont, McIntosh, Seymour & Co., 50 Church St.
 Fogg, Oscar H., Engr., Consld. Gas Co. of N. Y., 128 E. 15th St.
 Foran, George Jesse, Mgr. Condenser Dept., Internatl. Steam Pump Co.
 Forbes, Harry Rogers, East. Rep., Lumen Bearing Co., Rm. 573, 50 Church St.
 Forrest, George Munro, Engr., Union Typewriter Co., 293 Broadway.
 Forstall, Alfred E., Cons. Engr., 84 William St.
 Foster, Ernest Howard, V. P., Power Spec. Co., 111 Broadway.
 Foster, Horatio A., J. G. White & Co., Inc., 43 Exch. Pl.
 Foster, Jed S., Engr., Lidgerwood Mfg. Co., 96 Liberty St.
 Fowler, Geo. L., Cons. Mech. Engr., 83 Fulton St.
 Fox, Royal E., Jr., V. P., The Engr. Co., Rm. 1180, 50 Church St.
 Fox, William, Assoc. Prof. Physics, College of the City of N. Y., 139th St. and Convent Ave.
 Francisco, Ferris L. R., Cons. Engr., Rm. 1252, 200 Fifth Ave.
 Freeman, Joseph Harlan, Cons. Engr. and Mech. Expt., 45 Broadway.
 French, Lester Gray, Editor, Am. Soc. M. E., 29 W. 39th St.
 Frevert, H. F., Pres. and Treas., Frevert Mchy. Co., 38 Vesey St.
 Frohwein, Richard W. (Junior), Pur. Agt., M. H. Treadwell Co., 140 Cedar St.
 Fry, Alfred Brooks, Ch. Engr., U. S. Treas. Service, and Cons. Engr., Asso. for Protection of the Adirondacks, U. S. Custom House Bldg.
 Fuller, George W., Cons. Engr., 170 Broadway.
 Gantt, Henry L., Cons. Engr., 2915 Singer Bldg.
 Gardner, Henry (Junior), Supvr. Apprentices, N. Y. C. & H. R. R. Co., 1526 Grand Central Terminal.
 Garrahan, F. B. (Junior), Internatl. Nichol Co., 43 Exch. Pl.; also, Wilkes-Barre, Pa.
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- Gately, William Aloysius (Junior), Apprentice, De La Vergne Mch. Co.
- Gause, Fred Taylor, Lubricating Oil, Foreign Dept., Stand. Oil Co. of N. Y., 26 Broadway.
- Genung, Nelson H., V. P. and N. Y. Mgr., Coatesville Boiler Wks., 30 Church St.
- Gibbs, Geo., Cons. Engr., Gibbs & Hill, Cons. Engrs., Pennsylvania Sta.
- Gibson, George Herbert, Cons. Engr., Tribune Bldg.
- Gilbreth, Frank B., Genl. Contractor, 60 Broadway.
- Gillan, Howard A. (Junior), Mech. Engr., Rm. 616, 71 Broadway.
- Gillett, Lowry (Junior), Steam Engr., Genl. Chem. Co., 25 Broad St.
- Gilson, Harry W. (Junior), Engr., Blaisdell Canady Co., 90 West St.
- Gladden, Charles S. (Junior), Asst. Engr., Chas. O. Lenz, Rm. 617, 71 Broadway.
- Goentner, William B. (Junior), Asst. Engr., Dept. of Water Supply, Gas and Elec., 2020 Park Row Bldg., 13-21 Park Row.
- Goetze, Frederick A., Dean Sch. of Mines, Engrg. and Chem., Columbia Univ.
- Going, Charles Buxton, Editor, The Engineering Magazine, 140 Nassau St.
- Goldingham, Arthur Hugh, De La Vergne Mch. Co., foot of E. 138th St.
- Goldschmidt, Otto E., Cons. Engr., 30 W. 38th St.
- Gordon, Henry Decatur, 80 White St.
- Gordon, William, Mgr. Steam, Elec. and Plumbing Depts., Thompson-Starrett Co., 660 First Ave.
- Goss, Harry Terboss, Cons. Mech. Engr., Goss & Bryce, 76 William St.
- Goubert, Auguste A., 90 West St.
- Greene, Ernest Woodruff (Junior), Sales Engr., Alberger Pump & Condenser Co., 140 Cedar St.
- Greene, Harris Ray, N. Y. Sales Mgr., Merritt & Co., 50 Church St.; also, New Haven, Conn.
- Greul, W. Herman, In Charge of Price Bureau, Otis Elev. Co., Otis Elev. Bldg., 11th Ave. and 26th St.
- Griepe, August W. H., Engrg. Dept., N. Y. Edison Co., 55 Duane St.
- Gubelman, Frederick J., Pres., Regina Co., and East. Constr. Co., 47 W. 34th St.
- Gwilliam, George T., Civ. Engr., Pres., The Gwilliam Co., Broadway and 58th St.; also, Philadelphia, Pa.
- Haar, Selby, Siemens-Schuckert Co., 90 West St.
- Hackett, George E. (Junior), Cons. Engr., 90 West St.
- Haden, Harry Y., Pres., Turbine Equip. Co., 30 Church St.
- Haines, H. S., Cons. Engr., Engr.'s Club, 32 W. 40th St.
- Hall, Frederick Arthur, Mfrs.' Agt., Rm. 1702, 90 West St.
- Hall, Willis E., Cons. Engr., 30 Pine St.
- Halsey, Frederick A., Editor Emeritus, American Machinist, 505 Pearl St.
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- Hammond, John Hays, Cons. Engr., 71 Broadway.

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- Hannah, Frederick Augustus, Efficiency Engr., Aeolian Hall, 27 W. 42d St.
- Hardy, George F., Mill Arch. and Hyd. Engr., Langdon Bldg., 309 Broadway.
- Harris, Grenville A., Ch. Engr., Takata & Co., 50 Church St.
- Hartman, Francis M., Prof. of Elec. and Mech. Engrg., Cooper Union.
- Hartwell, Harry, Asst. to V. P., Pearson Engrg. Corp., 115 Broadway.
- Harvey, Daniel Carroll, Supt. of Inspcs., The Fidelity & Casualty Co., 92 Liberty St.
- Hatch, Edwin Glentworth (Junior), Mgr., Clark Elec. & Mfg. Co., 149 Broadway.
- Hawkins, Ernest Hubbard (Junior), Estimating Engr., Allis-Chalmers Co., 30 Church St.
- Hawthorne, Hayden Thwing (Junior), Export Sales Dept., Stand. Oil Co. of N. Y., 26 Broadway.
- Hayward, Henry S., Jr., Mech. Engr., 30 Church St.
- Hayward, Sterling F., Treas., Connelly Iron Sponge & Governor Co., 127 Duane St.; also, Cambridge, Mass.
- Hearne, Robert J., Secy. and Treas., Durbrow & Hearne Mfg. Co., 12 Wooster St.
- Heller, H. Howard, East. Sales Mgr., Hill Clutch Co., 50 Church St.
- Hendrick, Wallace Mather (Junior), Erection Engr., The N. Y. Continental Jewell Filtration Co.
- Hendry, W. Ferris, Supt., West. Elec. Co., 463 West St.
- Henney, David, Twombly & Henney, 55 Liberty St.
- Henshaw, Frederick V., Cons. Engr., Bankers Trust Bldg., 14 Wall St.
- Hepke, George A. (Junior), Salesman, Erie City Iron Wks., 2715 Singer Bldg.; also, Hamilton, O.
- Herbert, Frederick Davis, Genl. Sales Mgr., Terry Steam Turbine Co., 90 West St.
- Hering, Rudolph, Cons. Engr., Hering & Gregory, 170 Broadway.
- Herreshoff, J. B. Francis, V. P., Nichols Copper Co., Cons. Engr., Genl. Chemical Co., 25 Broad St.
- Herrick, James A., Metallurgical Engr., Cons. and Contr. Engr. for Herrick Patented Gas Producers, Valves, Furnaces, etc., Suite 1303-1304, 90 West St.
- Herriman, Victor D. (Junior), Engr., Internatl. Steam Pump Co., 115 Broadway.
- Hershey, Martin E., 114 Liberty St.
- Hey, Harry Albert (Junior), Assistant to Secretary, Am.Soc. M.E., 29 W. 39th St.
- Hill, E. Rowland, Cons. Engr., Gibbs & Hill, Pennsylvania Sta.
- Hill, Geo., Builder, 31 E. 27th St.
- Hill, Nicholas Snowdon, Jr., Cons. Hyd. and Sanitary Engr., 100 William St.
- Hintze, Thomas F. (Junior), Engr's Asst. Constr. Dept., Consoltd. Gas Co., foot of W. 42d St. Wks.

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- Hoffmann, Simon, First V. P., Loco. Superheater Co., 30 Church St.
- Holbrook, Dio Lewis, Engr., Otis Elev. Co., Otis Elev. Bldg., 11th Ave. and 26th St.
- Holbrook, Percy, V. P., Rail Joint Co., 185 Madison Ave.
- Hollander, Emanuel, Ch. of Estimating Staff, Engrg. Dept., Otis Elev. Co., Otis Elev. Bldg., 11th Ave. and 26th St.
- Holloway, H. F., 165 Broadway.
- Holme, Raymond Arthur (Junior), Salesman, De La Vergne Mch. Co.
- Horne, Convers Francis (Junior), Contr. Engr., Sterling Blower Co., Rm. 1025, 30 Church St.
- Horton, John T., Specialist in Equip. for Hoisting and Handling Material, 90 West St.
- Hough, David Leavitt, Pres., United Engrg. & Contr. Co., Pres., Cuban Engrg. & Contr. Co.
- Houghton, Charles E., Assoc. Prof. Mech. Engrg., N. Y. Univ.
- Howard, O. Zell, The Griscom Spencer Co., 90 West St.
- Howe, Albert W., Rep. and Engr., Robert Wetherill & Co., 17 Battery Pl.
- Howell, Frank Scott, Mech. Engr., Howell & Howell, 1182 Broadway.
- Howell, John Jacob (Junior), East. Mgr., The Marine Review and Power Boating, West St. Bldg.
- Hoxie, George L., Hoxie & Goodloe, 50 E. 41st St.; also, Los Angeles, Cal.
- Hoxie, Wm. D., V. P., The Babcock & Wilcox Co., 85 Liberty St.
- Hudson, Wilbur Gregory, V. P., Guarantee Constr. Co., 90 West St.
- Hulbert, William Rowsell, Sales Mgr., Goldschmidt Thermit Co., 90 West St.
- Hummel, Frank Louis, Sales Engr., The Hooven, Owens, Rentschler Co., 39 Cortlandt St.
- Humphrey, George S., Treas. and Pur. Agt., C. W. Hunt Co., 45 Broadway.
- Hunt, Wm. Floyd, 45 Broadway.
- Hunter, James Francis, Asst. Engr. of Constr., Consld. Gas Co., 4 Irving Pl.
- Hussey, Wm. Edgerly, Mgr. N. Y. Office, Providence Engrg. Wks., 50 Church St.
- Hutchings, Clifford F. (Junior), Sales Engr. Hoist Dept., Sprague Elec. Wks., 527 W. 34th St.
- Hutchinson, Cary T., Cons. Engr., 60 Wall St.
- Hutton, Frederick R., 257 W. 86th St., Honorary Secretary, Am.Soc.M.E., 29 W. 39th St.; Emeritus Prof. Mech. Engrg., Columbia Univ.; Cons. Engr.
- Hutton, Mancius S. (Junior), 257 W. 86th St.
- Hyatt, Herbert Richardson, Mech. Engr. Sales Dept., Custodis Chimney Constr. Co., 95 Nassau St.
- Hyde, Charles E., Marine Engr. and Naval Arch., 424 W. 20th St.
- Hymans, Frederick, Engr., Otis Elev. Co.

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Idell, Percy C., Mech. Engr. Sales Dept., The Babcock & Wilcox Co., 85 Liberty St.
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Ingham, Howard M., Efficiency Engr., Mohawk Bldg., 160 Fifth Ave.
Isham, Henry S., Mech. Draftsman, Interborough Rapid Transit Co., 165 Broadway.
Isherwood, Benjamin Franklin, Ret. Ch. Engr., Rank of Rear Admiral, U. S. N., 111 E. 36th St.
Jackson, Charles Arthur, Mech. and Hyd. Engr., The Pelton Water Wheel Co., 90 West St.
Jacobus, D. S., Advisory Engr., Babcock & Wilcox Co., 85 Liberty St.; also, Spec. Lecturer in Exper. Engrg., Stevens Inst. of Tech., Hoboken, N. J.
Jacobus, Robert F., Francisco & Jacobus, 200 Fifth Ave.
Jappe, Kurt Wade (Junior), with Harrison Williams, 60 Broadway.
Jenks, Llewellyn Howard, Mgr., N. Y. Office, The Frick Co., 39 Cortlandt St.
John, Griffith, Cons. Engr., Otis Elev. Co., Otis Elev. Bldg., 11th Ave. and 26th St.
Johnson, David Clayton (Junior), Asst. Engr., H. deB. Parsons, 22 William St.
Johnston, John Parry, Genl. Mgr., N. Y. Eng. Co., 165 Broadway.
Jones, Benjamin N., Mgr. of Mfg., Otis Elev. Co.
Jones, Frank Cazenove, Pres., W. A. Underhill Brick Co., 103 Park Ave.
Jones, John Emlyn, Engineers Club, 32 W. 40th St.
Jones, Russell Compton (Junior), Engrg. Dept., Griscom-Russell Co., 90 West St.
Jones, Walter J., Cons. Engr., 30 Church St.
Jordan, Edward V., Supt. of Constr., The M. W. Kellogg Co., 50 Church St.
Jowett, J. H., Genl. Sales Mgr., Ingersoll-Rand Co., 11 Broadway.
Just, Geo. A., Cons. Engr., and Pres., George A. Just Co., 239 Vernon Ave., Long Island City.
Katte, Edwin Britton, Ch. Engr., Elec. Traction, N. Y. C. & H. R. R., 5048 Grand Central Terminal.
Katzenstein, Martin L. (Junior), Mgr. Marine Dept., Internatl. Steam Pump Co., 115 Broadway.
Keenan, Walter Francis, Jr. (Junior), Asst. Engr., Power Spec. Co., 111 Broadway.
Keith, Thomas M., Engr., Robins Conveying Belt Co., 21 Park Row.
Kendrick, J. W., Ry. Expert, Trinity Bldg., 111 Broadway, and Steger Bldg., Chicago, Ill.
Kennedy, Harold J. (Junior), V. P., The Comerma Co., 4 E. 42d St.
Kennedy, J. J., Cons. Engr., 52 Broadway.
Kent, Henry R., V. P., Westinghouse, Church, Kerr & Co., 10 Bridge St.

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- Kent, Robert Thurston (Junior), Editor, Industrial Engineering, 90 West St.
- Kenyon, Wm. Houston, Member of Firm, Kenyon & Kenyon, 49 Wall St.
- Ketchum, Samuel, Ch. Draftsman, M. H. Treadwell Co., 140 Cedar St.
- King, Charles Arthur (Junior), Asst. Cons. Engr. to Henry C. Meyer, Jr., 1 Madison Ave.
- King, Fred S., Mgr. Gas Eng. Dept., Natl. Meter Co., 84-86 Chambers St.
- Kingsley, Frank, Asst. Engr., Westinghouse, Church, Kerr & Co.
- Kinkead, James A., Res. Sales Mgr., Parkesburg Iron Co., 30 Church St.
- Kirchhoff, Charles, 587 Riverside Drive.
- Kirk, Robert H., Howland-Kirk Co.
- Kirkup, Joseph P., S. K. F. Ball Bearing Co., 50 Church St.
- Kissick, Joseph, Jr. (Junior), Merchant Engr., 1113 Tribune Bldg.
- Kliesrath, Victor William, Ch. Engr., Bosch Magneto Co., 223 W. 46th St.
- Kneeland, Frank H. (Junior), Assoc. Editor, Coal Age, 505 Pearl St.
- Koenig, Adolph G., Member of Firm, Mortensen & Co., 114-116 E. 28th St.
- Kornfeld, Alfred Ephraim, 114 E. 71st St.
- Kraemer, Milton (Junior), Assoc. Cons. Engr., The U. S. Gold Dredging & Rubber Co. of Ecuador, S. A., 39 Liberty St.
- Laidlaw, Walter, Mem. Exec. Com., Internatl. Steam Pump Co., 11 Broadway; also, Cincinnati, O.
- Laird, Wilbur G., with Henry L. Doherty, 60 Wall St.
- Lane, J. S., Mech. Engr., The Engr. Co., 50 Church St.
- Lang, Charles (Junior), N. Y. Mgr., C. H. Wheeler Mfg. Co., 114 Liberty St.
- Lange, Heinrich Bartels (Junior), Mem. of Staff, Suffern & Son, 149 Broadway.
- Law, Frank E., V. P., The Fidelity & Casualty Co.
- Lawrence, John Henry (Junior), Asst. to Mech. Engr., N. Y. Edison Co., 55 Duane St.
- Lee, Nixon (Junior), Supt. Mch. Dept., Jaburg Bros., 536 Broome St.
- Lee, Ralph A. (Junior), Engr. Mfg. Dept., Barrett Mfg. Co., 17 Battery Pl.
- Leigh, Robert E. (Junior), Plant Engr., Charles F. Noyes Co., 92 William St.
- Lewis, David J., Jr., Sales Mgr., Lytton Mfg. Corp., 1159 Hudson Terminal Bldg., 50 Church St.
- Lieb, John W., Jr., Third V. P. and Assoc. Genl. Mgr., N. Y. Edison Co., 55-57 Duane St.
- Lighthipe, Wm. W., Mgr. Repair Dept., Asst. to Genl. Sales Mgr., Otis Elev. Co., Otis Elev. Bldg., 11th Ave. and 26th St.
- Lillibridge, Ray D., Pres., Ray D. Lillibridge, Inc., 2109 Trinity Bldg., 111 Broadway.
- Lindsay, W. Edward, Cons. Engr., 9 W. 91st St.
- Lindstrom, J. A., Struc. Engr., Genl. Chem. Co., 25 Broad St.

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- Lockwood, James Fred, Mgr., Security Elev. Safety Co., 126 W. 18th St.
- Longacre, Fredk. v. D., Ch. Engr. Gas and Elec. Dept., Ingersoll-Rand Co., 11 Broadway.
- Longenecker, Charles, Pres., Chas. Longenecker & Co., 150 Nassau St.
- Lorsch, Edwin S., Member of Firm, Sussfeld, Lorsch & Co., 90-94 Maiden Lane.
- Loud, Henry S., Ch. Engr., U. S. Wood Preserving Co., 165 Broadway.
- Low, Fred R., Editor, Power, 505 Pearl St.
- Loyd, John, Pres., John Loyd Co., 558-562 Water St.
- Lucke, Charles E., Prof. Mech. Engrg., Columbia Univ.
- Ludeman, Edwin Henry, Steam Engr., 165 Broadway.
- Lufkin, Elgood Chauncey, V. P., The Texas Co., 17 Battery Pl.
- Lydecker, Kenneth (Junior), P. C. Stuart Co., 1123 Broadway.
- Lyle, Joel Irvine, Mgr., Carrier Air Conditioning Co., 39 Cortlandt St.
- McClellan, William, V. P., The Champion McClellan Co., Cons. Engr., Pub. Service Com., Second Dist., 90 West St.; also, Albany.
- McCreery, James Harold (Junior), 802 Atlantic Bldg., 49 Wall St.
- McFarland, Walter M., Babcock & Wilcox Co., 85 Liberty St.
- McJilton, John Perkins (Junior), Draftsman, Loco. Superheater Co., 30 Church St.
- McKee, Joseph J., Mgr., C. A. Dunham Co., 5013 Metro. Life Bldg.
- McKee, Neal Trimble (Junior), Asst. Mech. Engr., Loco. Superheater Co., 30 Church St.
- McKiever, Wm. Henry, Everett Bldg., 45 E. 17th St.
- McKinney, Robt. C., Pres., Niles-Bement-Pond Co., Pratt & Whitney Co., 111 Broadway.
- McMillin, Emerson, Chairman Bd. of Directors, Am. Light & Traction Co., 40 Wall St.
- McNaughton, James, V. P., Am. Loco. Co., 30 Church St.
- MacLaren, Malcolm Neill, Nordberg Mfg. Co., 42 Broadway.
- Macdonald, James V. (Junior), Member of Firm, Ranald H. Macdonald & Co., 29 W. 34th St.
- Maclaren, J. Gayton, Dist. Engr., The Lamson Co., 15 E. 26th St.
- Macon, William Watts, Engrg. Editor, The Iron Age, 239 W. 39th St.
- Maguire, Jeremiah De Smet, Pres., Maguire Rubber Co., and Anchor Packing Co., 6 Church St.
- Mahl, Frederick William, Asst. to Dir. of Maintenance and Operation, Union Pacific System So. Pacific Co., Rm. 2506, 165 Broadway.
- Marble, Harry Mills (Junior), Solicitor of Patents, 141 Broadway.
- Marburg, Louis C., Secy. and Treas., Marburg Bros., Inc., U. S. Rubber Bldg., 1790 Broadway.

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 Marshall, Ernest Woods, Pat. Lawyer, 76 William St.
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 Mason, Daniel A., Supt., N. Y. Tribune Bldg., 154 Nassau St.
 Massa, Robt. F., H. W. Johns-Manville Co., 41st St. and Madison Ave.
 Masury, Alfred Fellows (Junior), Factory Mgr., Hewitt Motor Co., 102 West End Ave.
 Matthews, Fred Elwood, Sales Engr., H. W. Johns-Manville Co., 41st St. and Madison Ave.
 Matty, Leo J. (Junior), Pat. Lawyer, 141 Broadway.
 Meier, E. D., Pres., and Ch. Engr., Heine Safety Boiler Co., 11 Broadway.
 Merriam, Henry P., 243 Waverly Pl.
 Merrill, Albert S. (Junior), Turner Constr. Co., 11 Broadway.
 Mersereau, Theodore T., Mech. Engr., 80 Broad St.
 Mershon, Ralph D., Cons. Elec. and Mech. Engr., 80 Maiden Lane.
 Merz, Robert G. (Junior), Mech. Engr. and Ch. Draftsman, Am. Process Co., 68 William St.
 Meyer, Henry Coddington, Jr., Cons. Mech. Engr., Metro. Bldg., 1 Madison Ave.
 Michel, A. Eugene, Adv. Engr., Woolworth Bldg., 233 Broadway.
 Midgley, Frederick W. (Junior), Ch. Draftsman Eng. Dept., Otis Elev. Co.
 Miller, Fred J., Factory Mgr., Union Typewriter Co., 293 Broadway.
 Miller, Spencer, Lidgerwood Mfg. Co., 96 Liberty St.
 Minck, Peter (Junior), Asst. to Sales Mgr., N. Y. Office, Kilbourne & Jacobs Mfg. Co., 25 Broad St.
 Mills, Edmund, Marine Dept., Babcock & Wilcox Co., 85 Liberty St.
 Mitchell, Albert E., V. P., Wyckoff Pipe & Creosoting Co., Inc., 50 Church St.
 Mitchell, Benjamin M., Pres., Conveying Weigher Co., Engr. of Tests, N. Y. Lubricating Oil Co., and Mech. Engr., Manhattan Rubber Mfg. Co.
 Mizuno, Seiichi, Engr. Ry. and Elec. Mch. Depts., Mitsui & Co., Ltd., 445 Broome St.
 Molé, Harvey E., 55 Liberty St.
 Monaghan, Wm. Franchère, Engrg. Dept., N. Y. Edison Co., 55 Duane St.
 Monks, Wm. Douglas (Junior), Asst. Ch. Engr. Refrigerating Mch. Dept., De La Vergne Mch. Co., foot of E. 138th St.
 Montague, Chas. Dwight, Mech. Engr. with George H. Church, 55 Wall St.
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 Moore, William James Perry, Alberger Pump & Condenser Co., 140 Cedar St.
 Moran, Daniel E., Cons. Engr., 55 Liberty St.

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- Morse, Chas. M., Cons. Mech. Engr., 2 Rector St.; also, Buffalo.
- Mullaney, John J., 150 Nassau St.
- Müller, Teile H., Cons. Engr., Federal Sugar Refining Co., Rm. 44, 138 Front St.
- Mumford, Edgar Huidekoper, V. P. and Genl. Mgr., Mumford Molding Mch. Co., 30 Church St.
- Murphy, Benjamin Stewart (Junior), Asst. Engr. Mech. Dept., Hudson & Manhattan R. R. Co., 30 Church St.
- Murphy, Thomas Robert Hoysted (Junior), Res. Engr., Jos. H. Wallace & Co., 5 Beekman St.; also, Espanola, Ont., Canada.
- Murray, Thomas Edward, Second V. P. and Genl. Mgr., N. Y. Edison Co., 57 Duane St.
- Murrie, John L. (Junior), Ford, Bacon & Davis, 115 Broadway.
- Muther, Ellis F., East. Sales Mgr., Gisholt Mch. Co., 50 Church St.
- Muzzarelli, G. Stuart (Junior), Cons. Engr., Dover Boiler Wks., 50 Church St.
- Myers, David Moffat, Cons. Engr., 17 Battery Pl.
- Nate, Emile Henry (Junior), Mech. Engr. Steam Dept., Thompson-Starrett Co., 660 First Ave.
- Nathan, Alfred (Junior), Pres., Nathan Mfg. Co., 85 Liberty St.
- Neave, Pierson Mitchell (Junior), Telephone Engr., West. Elec. Co., Bethune and West Sts.
- Neff, Elmer Hartson, N. Y. Mgr., Brown & Sharpe Mfg. Co., Rm. 900, 20 Vesey St.
- Nelson, James W., Mgr., Supt. and Engr., Estate of Richard Dudgeon, 82 Broome St.
- Newcomb, Robert Scott (Junior), Mech. Engr., Walker & Chambers, 222 E. 41st St.
- Newell, Charles Z., Mech. Engr., Federal Leather Co., Rm. 202, 47 W. 42d St.
- Newell, William (Junior), Mech. Engr., Bureau of Factory Inspc., N. Y. State Dept. of Labor, 381 Fourth Ave.
- Nichols, Charles Hart, Cons. Engr., 1133 Broadway.
- Nichols, William Wallace, V. P. and Secy., Allis-Chalmers Co., 30 Church St.
- Nickerson, Alvano T., W. S. Barstow & Co., 50 Pine St.
- Noble, Alfred, 7 E. 42d St.
- Norden, Carl L. (Junior), Engr., The Sperry Gyroscope Co., 40 Wall St.
- Norris, Henry Lee (Junior), Supt. Bldgs. and Grounds, Columbia Univ.
- Norris, James U. (Junior), Asst. Mgr., Rockefeller Inst. for Medical Research, 66th St. and Ave. A.
- Oatley, Henry Bigelow, Mech. Engr., Loco. Superheater Co., 30 Church St.
- Ohmes, Arthur K., Member of Firm, Nygren, Tenney & Ohmes, 87 Nassau St.
- Orr, Alexander Macklin, Jr. (Junior), Partner, Gielow & Orr, 52 Broadway.

NEW YORK, New York (Continued).

- Orrok, Geo. A., Mech. Engr., N. Y. Edison Co., 55 Duane St.
 Osborne, Charles T., Pres., Osborne, Rea & Co., 241-243 W. 41st St.
 Ostergren, Oscar Patric, Mech. Engr., Rm. 1308, 2 Rector St.
 Ostrander, Allen Edward, Asst. Mech. Engr., Am. Car & Fdy. Co., 165 Broadway.
 Oviatt, David B., Asst. Engr., Bd. of Water Supply, City of N. Y., 147 Varick St.
 Palmer, Virgil Maro (Junior), Standardizing Engr., U. S. Motor Co., Broadway and 61st St.
 Parish, Wm. F., Mgr. Lubricating Div., The Texas Co., 17 Battery Pl.
 Park, Franklin A., V. P., The Singer Mfg. Co., 149 Broadway.
 Parker, Levin S., Ch. Engr., Atlas Dredging Co., 1629 Whitehall Bldg.
 Parr, Harry L., Asst. Prof. Mech. Engrg., Columbia Univ.
 Parson, Chas. H. (Junior), Treas., Parson Mfg. Co., Singer Bldg.
 Parsons, H. de B., Prof. Emeritus, Rensselaer Poly. Inst., Troy, and Cons. Engr., 22 William St.
 Parsons, W. Everett, Cons. Engr., 1639 Thld Ave.
 Patterson, A. W., Jr., Dist. Mgr. Hoist Dept., The Yale & Towne Mfg. Co., 9 Murray St.
 Pattison, Frank A., Cons. Engr., Centurian Bldg., 1182 Broadway.
 Payne, Nathan B. (Junior), Mgr. Government Dept., Manning, Maxwell & Moore, 85 Liberty St.
 Peabody, E. H., Marine Dept., Babcock & Wilcox Co., 85 Liberty St.
 Pearsall, Gilbert H., V. P., Jacobs-Shupert Firebox Co., 30 Church St.
 Pearson, F. S., Cons. Engr., 115 Broadway.
 Pearson, Walter Ambrose, 135 Front St.
 Peck, Chas. B., Mgr., B. F. Sturtevant Co., 50 Church St.
 Pendleton, Frank E. (Junior), Ch. Engr., N. Y. Steam Co., 140 Cedar St.
 Peper, John Henry, Jr. (Junior), Engr., 26 Broadway.
 Perkins, Julius A., Mech. Engr., 25 Broad St.
 Perry, Samuel B. (Junior), Ins. Engr., 68 William St.
 Perry, Wm. A., 111 Broadway.
 Peterson, John William, Pres. and Mgr., Peterson Engrg. Co., 30 Church St.
 Phillips, Ellis L. (Junior), Cons. Engr., Rm. 1663, 50 Church St.
 Pierce, Frederick Emery, Ch. Engr., The N. J. Zinc Co., 55 Wall St.
 Pigott, Reginald J. S. (Junior), Asst. Prof. Steam Engrg., Columbia Univ., Engrg. Bldg.
 Place, Clyde R., Mech. Engr., 70 E. 45th St.
 Platt, John, Pres., John Platt & Co., 97 Cedar St.
 Pollak, Charles P., Engineers' Club, 32 W. 40th St.
 Pomeroy, L. R., Cons. Engr., 105 W. 40th St.
 Pond, Henry O., Engr. in Charge and Supt. of Piping, Westinghouse, Church, Kerr & Co., 8-10 Bridge St.
 Porter, H. Hobart, Sanderson & Porter, Engrs., 52 William St.

NEW YORK, New York (Continued).

- Porter, Holbrook, F. J., 25 W. 39th St.
- Potter, Philip Arthur, Cons. Engr., Potter & Bartram, 30 Church St.
- Potts, S. Warren, Mech. Engr., 1820 Park Row Bldg.
- Powell, Marcus, Mgr., Crosby Steam Gage & Valve Co., 44 Dey St.
- Pressinger, W. P., Mgr. Compressor Dept., Chicago Pneu. Tool Co., 50 Church St.
- Preston, Geo. B., Engr., Westinghouse, Church, Kerr & Co., 10 Bridge St.
- Primrose, John, Ch. Engr., Power Spec. Co., 111 Broadway.
- Prindle, Edwin Jay, Pat. Law, Prindle & Wright, Trinity Bldg., 111 Broadway.
- Proal, Arthur B., Jr., Sales Engr., Robins Conveying Belt Co., Park Row Bldg., 13 Park Row.
- Prosser, Thomas, Thomas Prosser & Son, 15 Gold St.
- Pryor, Robert W., Jr. (Junior), Firm of Koithan & Pryor, 39 Cortlandt St.
- Putnam, Morris Havens, Engr. and Genl. Mgr., Terry Constr. Co., 252 W. 60th St.
- Quick, Howard Prescott, Mech. Engr., The Pearson Engrg. Corp., Ltd., 115 Broadway.
- Quimby, William E., Pres., Wm. E. Quimby, Inc., 548 W. 23d St.
- Ramsay, Herbert Hartley (Junior), Asst. Engr. with John Hays Hammond and Harris Hammond, 71 Broadway.
- Raqué, Philip E., Cons. Engr., 132 Nassau St.
- Rautenstrauch, Walter, Prof. Mech. Engrg., Columbia Univ.
- Ray, David H., Cons. Engr., 27 W. 33d St.
- Ray, Frederick (Junior), Ch. Engr., Alberger Pump & Condenser Co., 140 Cedar St.
- Reed, William E., 71 Broadway.
- Reese, Dale Fleming (Junior), Supt. Steam Boiler Dept., Ocean Accident & Guarantee Corp., Ltd., 59 John St.
- Reid, Robert C., Mgr. Truck Dept., Harrolds Motor Car Co., 233 W. 54th St.
- Reno, Jesse Wilford, Cons. Engr., Otis Elev. Co., 11th Ave. and 26th St.
- Reynolds, John P., Jr. (Junior), Mech. Engr., Dept. of Water Supply, Park Row Bldg.
- Reynolds, Philip Edgar (Junior), Engr. of Tests Mech. Dept., N. Y. Edison Co.
- Rice, Calvin W., Cons. Engr., Secretary, Am.Soc.M.E., 29 W. 39th St.
- Richards, Charles R., Dir., Cooper Union.
- Richards, Francis H., Mech. Engr., Pat. Atty, 9-15 Murray St.; also, Hartford, Conn.
- Richards, Frank, Managing Editor, Compressed Air, and Ingersoll-Rand Co., 11 Broadway.
- Richardson, Clifford, Cons. Engr., 30 Church St.
- Richardson, Thomas, Ch. Draftsman, W. S. Barstow & Co., 50 Pine St.
- Richmond, Julian, Asst. Engr., Bd. of Water Supply, 165 Broadway.

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- Ricker, Wm. Wood, Treas. and Secy., Guarantee Constr. Co., 140 Cedar St.
- Ricketts, Edwin Burnley (Junior), N. Y. Edison Co., 40th St. and 1st Ave.
- Riege, Rudolph, 26 Gramercy Park.
- Robinson, Frank H., Treas., Walter H. Foster Co., 1479 Fulton Bldg., 50 Church St.
- Roelker, H. B., Mech. Engr., 41 Maiden Lane.
- Roesler, Dr. Rudolf (Junior), Cons. Engr., 25 Broad St.; also, Berlin, Germany.
- Rogers, Fred. E., Editor, Machinery, and Railway Machinery, 49-55 Lafayette St.
- Rogers, Robert Fletcher, Pat. Lawyer, 45 Broadway.
- Roney, Wm. R., Pres., Securities & Constr. Co. of Am., 15 William St.
- Ross, Charles Everett, Cons. Engr., 52 Beaver St.
- Ross, Philip Lawrence (Junior), Mech. Engr., Gunn, Richards & Co., 43 Exchange Pl.
- Rowntree, Bernard, East. Mgr., Burdett-Rowntree Mfg. Co., Rm. 1774, 50 Church St.
- Royse, Daniel, Asst. to Dir. of Purchases, Union Pacific R. R., 165 Broadway.
- Ruckes, Joseph J., Jr., Efficiency Engr., Barrett Mfg. Co., 17 Battery Pl.
- Ruddy, William (Junior), Ruddy & Howe, 150 Nassau St.
- Ruggles, Wm. Barker, Pres., Ruggles-Coles Engrg. Co., 50 Church St.
- Ruppel, Richard (Junior), Mech. Engr., Griggs & Holbrook, 3 S. William St.
- Rust, Robert R., Engr. in Charge of Operation, also Asst. Secy., The Central Fdy. Co.
- Rutherford, Eugene W., Mech. Engr. and Asst. to Genl. Mgr., U. S. Rubber Co., 42 Broadway.
- Ryan, William John (Junior), Asst. Mech. Engr., Pa. Coal & Coke Corp., 17 Battery Pl.
- Sanderson, Edwin N., Sanderson & Porter, 52 William St.
- Sanford, Warren Bixby, Head of Mfg. Branch, West. Elec. Co., 463 West St.
- Sanguinetti, Philip C., Production Engrg. Dept., Marwick, Mitchell & Co., 79 Wall St.
- Sargent, William Durham, Chairman, Bd. of Directors, Reading-Bayonne Steel Casting Co., 30 Church St.
- Sar Vant, Wilbur N. (Junior), Asst. Engr., Am. Process Co., 68 William St.
- Saunders, William Lawrence, Pres., Ingersoll-Rand Co., 11 Broadway.
- Sayer, Eugene Young, 60 Wall St.
- Sayre, William Heysham, Pres., Am. Abrasive Metals Co., 50 Church St.
- Schaefer, Frederick Rullman (Junior), Dist. Sales Mgr., Taylor-Wharton Iron & Steel Co., 100 Broadway.
- Schaeffer, Simon S. (Junior), Mech. Engr., Thompson-Starrett Co., 51 Wall St.
- Schaeffler, Joseph C., Arch. and Engr., 38-40 W. 32d St.

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- Scheele, John M. B. (Junior), 1479 Fulton Bldg., 50 Church St.
- Scheffler, Frederick A., Babcock & Wilcox Co., 85 Liberty St.
- Schmidt, Ferdinand L., Mch. Mfg., 150 Eleventh Ave.
- Schnuck, Edward F., Production Engr. and Treas., Jabez Burns & Sons, 600 W. 43d St.
- Schoenijahn, Robert P. (Junior), Mech. and Elec. Engr., L. B. Marks & J. E. Woodwell, Cons. Engrs., 103 Park Ave.
- Scholl, Julian, Mech. Engr. and Mfr. Road Making Mch., 126 Liberty St.
- Schoolfield, Frank R., Ch. Draftsman, Ford, Bacon & Davis.
- Schott, Dr. Otto, Cons. Engr. and Tech. Chem., Fifth Ave. Bldg.
- Schuetz, Frederick F. (Junior), Solicitor of Patents and Mech. Engr., Hudson Terminal Bldg., 50 Church St.
- Schwab, Charles M., Pres., Bethlehem Steel Co., 111 Broadway; also, South Bethlehem, Pa.
- Schwanhausser, William, Ch. Engr., Internatl. Steam Pump Co., 115 Broadway.
- Schwartz, Carl, First Asst. Engr., N. Y. C. & H. R. R. R. Co., 5048 Grand Central Terminal.
- Seaman, Edwin H. (Junior), Ins. Engr. with Underwriters at Am. Lloyds, 123 William St.
- Seaman, Henry B., Cons. Engr., 165 Broadway.
- Seawell, Bert W., Supt., Chas. Meads & Co., 165 Broadway.
- See, Alonzo B., A. B. See Elec. Elev. Co., 220 Broadway.
- Sergeant, Chas. H., 1818 Webster Ave.
- Serrell, Harold, Fulton Bldg., 87 Nassau St.
- Serrell, John A., 71 Murray St.
- Sewall, M. W., Babcock & Wilcox Co., 85 Liberty St.
- Shafter, Ruland R. (Junior), Estimating and Sales Engr., Traylor Engrg. & Mfg. Co., 30 Church St.
- Shaw, Arthur Derwood, Packard Motor Car Co., 61st St. and Broadway.
- Shepard, Geo. H., Emerson Co., 30 Church St.; also, Syracuse.
- Sheppard, John Leefe, Jr., Constr. Dept., N. E. Engrg. Co., 50 Church St.; also, Newark, O.
- Shiebler, Marvin, Cons. Engr., 30 Church St.
- Shields, George Rex, Engr., Improved Equip. Co., 60 Wall St.
- Siegel, Fred Jack (Junior), 564 Park Ave.
- Simpson, Colin C., Asst. Secy. and Genl. Supt. of Distribution, Consltd. Gas Co. of N. Y., 4 Irving Pl.
- Simpson, Colin Campbell, Jr. (Junior), Engr. Dept. of Mains and Services, Consltd. Gas Co. of N. Y., 4 Irving Pl.
- Simpson, William K. (Junior), Mech. Engr., Nason Mfg. Co., 71 Fulton St.
- Sinclair, Dr. Angus, Editor and Publisher, Angus Sinclair Co., 114 Liberty St.
- Slade, Arthur J., Cons. Engr., 1600 Broadway.
- Slauson, Harold W. (Junior), Mgr., Tech. Press Bureau, Box 27, Times Sq. Sta.
- Slee, Norman S. (Junior), Babcock & Wilcox Co., 85 Liberty St.
- Slichter, Walter I., Prof. Elec. Engrg., Columbia Univ.

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- Sloane, Charles O'Connor (Junior), Pratt & Whitney Co., 111 Broadway.
- Slocum, Chester A. (Junior), Cons. Engr., Douglas Sprague & Associates, 39 Cortlandt St.
- Smith, A. Parker, Lawyer, Counsel in Pat. Cases, U. S. Express Bldg., 2 Rector St.
- Smith, Allen C., Otis Elev. Co.
- Smith, Edward Jos., Cons. Engr. and Mfrs'. Agt., 30 Church St.
- Smith, J. Waldo, Ch. Engr., Bd. of Water Supply, City of N. Y., 165 Broadway.
- Smith, Jesse M., Mech. and Elec. Engr. and Expt. in Pat. Causes, Rm. M-14, 220 Broadway.
- Smith, Julian C., Pres. and Mgr., Vacuum Spec. Co., First Ave. and 36th St.
- Snow, Norman Leslie (Junior), Asst. Genl. Sales Mgr., Terry Steam Turbine Co., 90 West St.
- Sorzano, Julio Frederico, Cons. Civ. and Mech. Engr., Pres., Pan-Am. Chamber of Commerce, 42 Broadway.
- Sparrow, John Porterfield, Ch. Engr., N. Y. Edison Co., 55 Duane St.
- Sperry, Elmer Ambrose, Pres. and Engr., The Sperry Gyroscope Co., 74 Broadway.
- Spilsbury, Edmund Gybbon, Cons. Engr., 45 Broadway.
- Spiro, Charles, Pres. and Genl. Mgr., Columbia Typewriter Mfg. Co., 39 W. 116th St.
- Stangland, B. F., Mech. Engr., 45 Fulton St.
- Stanton, Alden D. (Junior), Ch. Draftsman, Dept. Bldgs. and Grounds, Columbia Univ.
- Stanton, Frank McMillan, Min. Engr., 208 Fifth Ave.
- Starr, John Edwin, Pres., Starr Engrg. Co., 50 Church St.
- Stebbins, Theodore, 27 W. 67th St.
- Steel, Reginald Armstrong (Junior), Estimator and Draftsman, McDougall & Potter Co.
- Stehlin, Joseph, Pres., Stehlin-Miller-Henes Co., Terminal Bldg., 41st St. and Park Ave., Pres., Farmers Feed Co., 532 E. 76th St.
- Stephens, Phineas Varnum, Cons. Engr., 1199 Boston Rd.; also, Jacksonville, Fla.
- Stevens, Alfred H., Engr. and Contr., 149 Broadway.
- Stevens, Robert H., Stevens Bros., 149 Broadway.
- Stevens, Wm. N. (Junior), Engrg. Dept., John Simmons Co., 110 Centre St.
- Stevenson, T. Kennedy (Junior), Engr., Duplex Metals Co., 30 Church St.
- Stillman, Austin Frank, V. P., Wks. Mgr. and Secy., Watson-Stillman Co., Terminal Bldg., 50 Church St.
- Stillman, Edwin A. (Junior), Watson-Stillman Co., 50 Church St.
- Stix, Lawrence Cullman (Junior), 495 West End Ave.
- Stone, Mason A., Jr. (Junior), Robins Belt Conveyor Co., 13 Park Row.
- Stott, Henry G., Supt. M. P., I. R. T. Co., and N. Y. R. R. Co., 600 W. 59th St.
- Stoughton, Bradley, Cons. Engr., 165 Broadway; also, New Canaan, Conn.

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- Stovel, Russell W., Mech. Engr., Westinghouse, Church, Kerr & Co., 10 Bridge St.
- Stratton, E. Platt, Engr. and Naval Arch., Supvr., Am. Bureau of Shipping, and Am. Lloyds, Cons. Engr., Surveyor to Bd. of Underwriters of N. Y., 66 Beaver St.
- Straub, C. Lee, Mech. Engr., Lewisohn Bros., 11 Broadway.
- Street, Clement F., V. P., Loco. Stoker Co., 30 Church St.
- Street, Edgar L., Cons. Engr., 43 Cedar St.
- String, Joseph Starr (Junior), Asst. Engr., Mosher Water Tube Boiler Co., 30 Church St.
- Sturgis, Raynor Francis (Junior), Cost Accountant, Corn Products Refining Co., 17 Battery Pl.
- Suplee, Henry Harrison, Pres., Cassier Magazine Co., and Editor, Cassier's Magazine, 12 W. 31st St.
- Suter, Geo. A., Pres., G. A. Suter & Co., 112 Wooster St.
- Sutton, Frank, Cons. Engr., 80 Broadway.
- Swan, John Joseph, The Oil Power Engrg. Corp.
- Swenson, Bernard Victor, Barron G. Collier, Inc., 175 Fifth Ave.
- Symonds, George P., Constr. Engr., Alberger Pump & Condenser Co., 140 Cedar St.
- Tallmadge, Webster (Junior), Erecting Engr. Steam Turbines, Westinghouse Mch. Co., 165 Broadway.
- Taylor, George W. K., 104-106 John St.
- Taylor, John T., Supt., 156 Fifth Ave.
- Taylor, Stevenson, V. P., Quintard Iron Wks. Co., 742 E. 12th St.
- Taylor, Wyatt W., Engrg. Dept., Am. Can Co., 447 W. 14th St.
- Ten Broeck, Floyd G., Cons. Engr., Fifth Ave. Bldg., 200 Fifth Ave.
- Tenney, Theodore Smith, Nygren, Tenney & Ohmes, 87 Nassau St.
- Terwilliger, Gerald Edgar (Junior), Pat. Lawyer; Managing Editor, The Stevens Indicator, 1 Liberty St.
- Thomas, Charles W., Asst. Prof. Mech. Dept., Columbia Univ.
- Thomas, James Winthrop, Engr., The United Gas & Elec. Corp., 40 Wall St.
- Thompson, Edward P., Registered Pat. Atty. and Cons. Engr., 34 E. 32d St.; also, Washington, D. C.
- Thompson, O. C., Mech. Engr., Healy Box Corp., 105 W. 40th St.
- Thomson, J. Stewart (Junior), Mgr. Gas Eng. Dept., Internatl. Steam Pump Co., 115 Broadway.
- Thomson, John, Pres., John Thomson Press Co., 253 Broadway.
- Thomson, John Edgar (Junior), V. P. and Treas., John Thomson Press Co., 253 Broadway.
- Thomson, T. Kennard, Cons. Engr., Hudson Terminal Bldg., 50 Church St.
- Thorp, Frederick P. (Junior), Power & Min. Mchy. Co., 115 Broadway.
- Thurston, Edward D., Jr., Instr. Dept. of Mech. Engrg., Columbia Univ.
- Timmis, Walter S., Cons. Engr., Marbridge Bldg., 47 W. 34th St.
- Tischner, Charles F., Jr. (Junior), Pat. Atty., 149 Broadway.

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- Titcomb, George E., East. Branch Sales Mgr., The McMyler Interstate Co., Rm. 1756, 50 Church St.
- Torrance, Henry, Jr., V. P. and Treas., Carbondale Mch. Co., 50 Church St.
- Torrey, Herbert Gray, Assayer and Metallurgist, Rm. 309, 10 Wall St.
- Towl, Forrest M., Cons. Engr., Pres., So. Pipe Line Co., 26 Broadway.
- Trautschold, Reginald (Junior), Mech. Engr., Cons. Engr., 22 E. 10th St.
- Tribken, Charles W., Ch. Engr., Automatic Sprinkler Co. of Am., 123 William St.
- Troth, P. Howard, Genl. Sales Mgr., The Fairbanks Co., 416 Broome St.
- Tucker, Edwin D., Mech. Engr., 39-41 W. 23d St.
- Tuska, Gustave R., Cons. Engr., 68 William St.
- Tuttle, Irving E. (Junior), Engr., Westinghouse, Church, Kerr & Co., 10 Bridge St.
- Twining, Wm. S., Ford, Bacon & Davis, 115 Broadway.
- Ulmann, Chas. J., Mech. Engr., Bernhard Ulmann & Co., 107-113 Grand St.
- Ulrich, Max Julius, 570 W. 182d St.
- Upson, Maxwell Mayhew, Secy., Ch. Engr. and Genl. Mgr., Raymond Concrete Pile Co., 140 Cedar St.
- Vanderbilt, Cornelius, 30 Pine St.
- Van Derhoef, Geo. Nixon, East. Cons. Engr., Dodge Mfg. Co., 21 Murray St.
- Van Winkle, Edward, Cons. Pat. Engr., West St. Bldg., Cedar and West Sts.
- Vehslage, Harold Edwin (Junior), Mech. Engr., Am. Cotton Oil Co.
- Veit, Richard C., Secy., Stand. Oil Co. of N. Y., 26 Broadway.
- Veitch, Thomas (Junior), Cons. Auto. Engr., 1784 Broadway.
- de Verastegui, Albert, Mgr. Export Dept., Babcock & Wilcox Co., 85 Liberty St.
- Vickess, Samuel, Cons. Engr., 129 Front St.
- Vincent, Arthur S., Cons. Engr. and Supt., Belnord Apts., 86th St. and Broadway.
- Viola, Bartholomew, Cons. Engr., 140 Liberty St.
- Voorhees, Gardner Tufts, Refrig. Engr., Engineers' Club, 32 W. 40th St.
- Waern, A. W., Cons. Engr., Jos. H. Wallace & Co., Temple Court Bldg.
- Waitt, Arthur M., Pres., Stand. Third Rail Co., Cons. Engr., Rm. 1417, 165 Broadway.
- Waldo, Leonard, Cons. Engr., 802 Atlantic Bldg., 49 Wall St.
- Waldron, Frederick A., Industrial Engr., Rm. 2200, 37 Wall St.
- Wales, Chas. M., Agt., Cleveland City Forge & Iron Co., 11 Broadway.
- Walker, Gilbert S., Asst. Inspc. Engr., Isthmian Canal Com., 24 State St.
- Wallace, Joseph H., Industrial Engr., Temple Court Bldg.
- Walsh, Thomas J. (Junior), E. H. Rollins & Sons, 43 Exch. Pl.; also, Ansonia, Conn.

NEW YORK, New York (Continued).

- Watson, Henry D., East. Sales Mgr., Internatl. Motor Co., 1770 Broadway.
- Weager, Theodore Alfred (Junior), Sales Engr., Carrier Air Conditioning Co., 39 Cortlandt St.
- Weber, Herman Frederick (Junior), Draftsman, Pearson Engrg. Corp., 115 Broadway.
- Webster, Hosea, Dist. Sales Mgr., Babcock & Wilcox Co., 85 Liberty St.
- Webster, Lawrence Burns (Junior), Efficiency Engr., Am. Gas & Elec. Co., 30 Church St.; also, Marion, Ind.
- Weichert, Arnold E., J. G. White & Co., 43 Exch. Pl.
- Weick, Charles William, Asst. Prof. in Industrial Arts, Teachers College, Columbia Univ.
- Weiss, Carl William, Mietz & Weiss.
- Weissblatt, Murray E. (Junior), Crocker-Wheeler Co., 30 Church St.
- Wellington, J. W., V. P., U. S. Motor Co., 3 W. 61st St.
- Wells, G. A., Ch. Engr., Adams Express Co., 53 Broadway.
- Wells, J. Leland, Pres., Wells & Newton Co., 292 Ave. B.
- Wells, James Hollis, Member of Firm, Clinton & Russell, 32 Nassau St.
- Westinghouse, H. Herman, V. P., Westinghouse Air Brake Co., 165 Broadway.
- Weston, Frederick Willoughby, Rep., Baldwin Loco. Wks., Stand. Steel Wks., 50 Church St.
- Wheeler, Wm. Trimble, 286 Greenwich St.
- Whinery, Samuel, Cons. Civ. Engr., 95 Liberty St.
- Whitcomb, LeRoy A. (Junior), Checker, N. Y. Edison Co., 55 Duane St.
- White, Merton G. (Junior), N. Y. Rep., Fitchburg Steam Eng. Co., and Harrisburg Star Boiler Co., 1 Madison Ave.
- Whittemore, Herbert L., Fayerweather Hall, Columbia Univ.
- Whyte, Frederic M., V. P., Hutchins Car Roofing Co.
- Wilder, Clifton W., Elec. Engr., Pub. Service Com., 154 Nassau St.
- Wiley, Wm. H., 43-45 E. 19th St.
- Williams, Franklin, Engrg. Specialties, 39 Cortlandt St.
- Williams, Harvey D., Cons. Engr., The Waterbury Tool Co.
- Williams, Louis William, Dist. Sales Mgr., Union Drawn Steel Co., 460 Washington St.
- Williams, Walter Gordon, Constr. Engr., The M. W. Kellogg Co., 50 Church St.
- Williamson, Alfred, Mech. Engr., Dept. Water Supply, Gas & Elec., 13 Park Row.
- Williamson, Leroy A., Pres., L. A. Williamson Co., 261 Broadway.
- Wilson, Jacob D. (Junior), Pres., Genl. Mgr. and Mech. Engr., Am. Elev. Co., 113-115 Cedar St.
- Wilson, James Wright, Factory Mgr., Bramhall Deane Co., 264 Water St.
- Wilson, Wm. R. (Junior), Alberger Pump & Condenser Co., 140 Cedar St.
- Winship, James G., Internatl. Steam Pump Co., 115 Broadway.
- Winship, W. E., Engr., Gould Storage Battery Co., 345 Fifth Ave.

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- Wood, Henry Shotwell, Cons. Engr., 1825 Park Row Bldg.
 Wood, Thomas C. (Junior), U. S. Inspr., Isthmian Canal Com.,
 24 State St.
 Woodwell, Julian E., Cons. Engr., Terminal Bldg., Park Ave.
 and 41st St.
 Woolson, Harry Thurber, Ch. Draftsman Engrg. Dept., Gas
 Eng. & Power Co. and Chas. L. Seabury & Co., Consldt.
 Woolson, Ira H., Cons. Engr., Natl. Bd. of Fire Underwriters,
 135 William St.
 Woolson, Orosco C., Constr. Engr. and Contr., 39 Cortlandt St.
 Worth, Charles C., Asst. Supt. Constr., N. Y. Edison Co., 55
 Duane St.
 Wright, James Knox, Cons. Engr. and Mfr., Wright's Pat.
 Safety Stop, 136 Liberty St.
 Wright, Roydon V., Mech. Dept. Editor, Railway Age Gazette,
 83 Fulton St.
 Wylie, Howard M. (Junior), Healy Box Corp.
 Wynkoop, Hubert S., Elec. Engr., Dept. Water Supply, Gas and
 Elec., 13-21 Park Row.
 Yereance, William B., Cons. Engr. and Operator for Public
 Utilities, 128 Broadway.
 York, H. W., Cons. Engr., Am. Smelting & Refining Co., 165
 Broadway.
 Zehnder, Chas. H., Pres., Austen Coal & Coke Co., 140 Cedar St.
- Newburgh.**—Davison, Clarence M. (Junior), Mech. Engr., Al-
 berger Pump & Condenser Co., Wks. Office.
 Penney, Edgar, Cons. Engr., Alberger Pump & Condenser Co.
- Niagara Falls.**—Egbert, Chas. Coggill, Cons. Engr., 153 Gluck
 Bldg.
 Harper, John Lyell, Ch. Engr., Hyd. Power Co., and Cliff Elec.
 Dist. Co.
 Hollmann, Frederick W. (Junior), Wks. Engr., The Carborun-
 dum Co.
 Johnson, Raymond D., Hyd. Engr., Ontario Power Co., Drawer
 496.
 Wilson, Hugh H., Supt., Ontario Power Co. of Niagara Falls.
- North Tonawanda.**—Bishop, Charles R., Secy. and Genl. Mgr.,
 Am. Dist. Steam Co., Paynes Ave.
- Oneida.**—Leonard, Stephen Rose, Second V. P., Oneida Com-
 munity, Ltd.
- Ossining.**—Scott, J. Alvah.
- Oswego.**—Brock, Walter I., Engr.
 Fitzgibbons, David, V. P. and Genl. Mgr., Fitzgibbons Boiler
 Co.
 Gray, Niel, Jr., Prop., Oswego Mch. Wks.
 Joy, Robert, Supt. of Boiler Dept., Kingsford Fdy. & Mch.
 Wks.
- Painted Post.**—Carpenter, Allan O., Designing Dept., Ingersoll-
 Rand Co.
 Wickersham, Nathan R., Supt., Ingersoll-Rand Co.
- Pearl River.**—Hitchcock, Fred'k Matthew, Mgr., Dexter Folder Co.
 Lyman, Elihu Root (Junior), Asst. Wks. Mgr., Dexter Folder
 Co.
- Port Chester.**—Boerner, Emile C., Cons. Mech. Engr., Russell,
 Burdsall & Ward Bolt & Nut Co.

NEW YORK, Port Chester (Continued).

- Burdsall, Ellwood (Junior), Secy. and Designing Engr., Russell, Burdsall & Ward Bolt & Nut Co.
- Finley, A. D., Designing Engr., Russell, Burdsall & Ward Bolt & Nut Co.
- McWeeney, Laurence Riley (Junior), Factory Accountant, Russell, Burdsall & Ward Bolt & Nut Co.
- Rupf, Ernest L. (Junior), Mech. Expt., Russell, Burdsall & Ward Bolt & Nut Co.
- Port Jervis.**—Rogers, Robert W. (Junior), Practical and Tech. Instr. of Apprentices, Erie R. R. Shop.
- Port Washington, L. I.**—Connett, Lyndon Rutan (Junior).
- Potsdam.**—Towle, William Mason, Prof. of Industrial Engrg., Clarkson Memorial Sch. of Tech.
- Poughkeepsie.**—Hart, Frederick, Cons. Mech. Engr., Lansing Ave. Leitch, Meredith, Mech. Engr., De Laval Separator Co.
- Miller, Theodore Harry, Supt., De Laval Separator Co.
- Prince Bay, S. I.**—Gulowsen, G. A., Draftsman, The S. S. White Dental Mfg. Co.
- Porter, Will Roswell, Asst. M. M., S. S. White Dental Mfg. Co., S. I. Factory.
- Remsenburg, L. I.**—Vanderbilt, Aaron.
- Rochester.**—Alexander, Chas. A., Pres. and Treas., The Alexander, Shumay & Utz Co., 16 State St.
- Ancona, John F., Mech. Engr., Kodak Park Wks., Eastman Kodak Co.
- Austin, William S., Supvg. Engr., Kodak Park Wks., Eastman Kodak Co.
- Bausch, Carl L. (Junior), Asst. Mech. Supt., Bausch & Lomb Optical Co., 635 St. Paul St.
- Cochrane, Robert B., 555 Frost Ave.
- Collins, Francis Alton (Junior), Sales Dept., Auburn Ball Bearing Co., 29 Elizabeth St.
- Cook, E. J., V. P. and Genl. Mgr., N. Y. State Rys., Rochester Lines, 267 State St.
- Crocker, Allen Swift, Supt. Industrial Arts Dept., Mechanics Inst., and Cons. Engr., 55 Plymouth Ave.
- Davis, Robt. G., Cons. and Constr. Engr., Insurance Bldg., W. Main St. and Irving Pl.
- Ernsberger, Millard Clayton, Prof. Mech. Engrg., Univ. of Rochester.
- Firestone, Sigmund, Cons. Mech. and Elec. Engr., Granite Bldg.
- Gleason, William, Pres., The Gleason Wks.
- Hawkins, Edgar Marvin (Junior), Genl. Mgr., M. D. Knowlton Co., 29-35 Elizabeth St.
- Hinrichs, Frederic William, Jr., Asst. Prof. Applied Mechanics, Univ. of Rochester.
- Hogle, Milton W., Hopeman Bros. Lumber & Mfg. Co., 569 Lyell Ave.
- Holmes, Walter G., Mech. Engr., Wilmot Castle Co.
- Jones, Albert I., Supt., The Pfaudler Co., 217 Cutler Bldg.
- Knowlton, Frederic K. (Junior), V. P., M. D. Knowlton Co., and V. P., Auburn Ball Bearing Co.
- Lovejoy, Frank Wm. (Junior), Genl. Mgr. Mfg. Depts., Eastman Kodak Co.

NEW YORK, Rochester (Continued).

- Lundgaard, Iyar (Junior), Industrial Engr., Rochester Ry. & Light Co., 34 Clinton Ave., N.
- Noyes, Henry Taylor, Treas., German-Am. Button Co.
- Parker, John Castlereagh, Mech. and Elec. Engr., Rochester Ry. & Light Co.
- Price, Melvin, Instr. in Mch. Design, The Univ. of Rochester.
- Richardson, Levi S., Engr. with S. Firestone, Granite Bldg.
- Saegmuller, George Nicholas, Mech. Engr., Mfr., V. P., Bausch & Lomb Optical Co.
- Svensson, Johan Alfred, Ingle Mch. Co., 371 St. Paul St.
- Wilcox, Perley Smith (Junior), Asst. Mgr., Kodak Park Wks., Eastman Kodak Co.
- Sacketts Harbor.**—Rankin, Thos. L.
- Schenectady.**—Batchelder, Asa Fred, Designing Engr. Ry. Engrg. Dept., Genl. Elec. Co.
- Brooks, Louis C. (Junior), Elec. Engr. Industrial Control Dept., Genl. Elec. Co.
- Capp, John Allen, Chief of Test Lab., Genl. Elec. Co.
- Clark, John Henry, Cons. Engr., Genl. Elec. Co.
- Cole, Francis J., Ch. Cons. Engr., Am. Loco. Co.
- Dalton, William, Ch. Engr., Am. Loco. Co.
- Dodge, Austin R., Engr., Genl. Elec. Co.
- Ely, Wm. Grosvenor, Supt. Constr., Genl. Elec. Co.
- Emmet, W. L. R., Engr. Ltg. Dept., Genl. Elec. Co.
- Farquhar, Edmund Henry, Supt., Genl. Elec. Co.
- Fonda, Burton Colburn (Junior), Student Engr., Genl. Elec. Co.
- Gilbert, E. E., Sales Mgr. Turbine Dept., Genl. Elec. Co.
- Hanzlik, Henry J., Foreign Dept., Genl. Elec. Co.
- Heisler, Charles L., 325 Glenwood Blvd.
- Heisler, F. Wm., 325 Glenwood Blvd.
- Hewlett, Edward M., Engr. of Switchboard Dept., Genl. Elec. Co.
- Hill, Charles Hubbard, Designing Engr., Genl. Elec. Co.
- Junggren, Oscar F., Engr. Turbine Dept., Genl. Elec. Co.
- Knapp, Edwin C. (Junior), 180 Furman St.
- Knight, Charles Donaldson, Elec. Engr., Ch. Engr. Industrial Control Dept., Genl. Elec. Co.
- Kruesi, August H., Engr. of Constr., Genl. Elec. Co.
- Landreth, Olin H., Prof. Engrg., Union College, and Cons. Engr.
- Lane, Arthur M., Asst. Engr., Genl. Drawing Rm., Am. Loco. Co.
- Mann, A. S., Mech. Engr., Genl. Elec. Co.
- Mellin, Carl J., Cons. Engr., Am. Loco. Co.
- Moore, Allen H., Genl. Elec. Co.; also, Albany.
- Mortensen, Caspar (Junior), Designer Mch. Tool Dept., Genl. Elec. Co.
- Norris, William H., Jr. (Junior), Lighting Dept., Genl. Elec. Co.
- Osborne, L. Edward, Ch. Draftsman to Clement F. Street, 166 Washington Ave.
- Peck, Henry W., V. P. and Genl. Mgr., Schenectady Ill. Co., and Mohawk Gas Co.
- Pitkin, Arthur Frederick (Junior), Mech. Engr., Genl. Elec. Co.
- Potter, Wm. Bancroft, Engr. Ry. and Traction Dept., Genl. Elec. Co.

NEW YORK, Schenectady (Continued).

- Pratt, Francis C., care of Genl. Elec. Co.
 Reid, Wm. L., Genl. Wks. Mgr., Am. Loco. Co.
 Reist, H. G., Mech. and Elec. Engr., Genl. Elec. Co.
 Riddell, John, Mech. Supt., Genl. Elec. Co., Schenectady Wks.
 Rohrer, Albert L., Elec. Supt., Genl. Elec. Co.
 Rushmore, David Barker, Ch. Engr. Power and Min. Dept., Genl. Elec. Co.
 Schenck, Leon H. (Junior), 1379 Union St.
 Scudder, Hewlett, Jr. (Junior), Pat. Dept., Genl. Elec. Co.
 Shirrell, David, Am. Loco. Co.
 Spalding, Chester M., Genl. Elec. Co.
 Steinmetz, Charles P., Cons. Engr., Genl. Elec. Co., and Prof. Elec. Engrg., Union Univ.
 Stone, Charles Waterman, Cons. Engr., Genl. Elec. Co.
 Torrance, Kenneth, Mech. Engr., Genl. Elec. Co.
 Turner, Charles P., Constr. Foreman, Constr. Dept., Genl. Elec. Co.
 Upp, John W., Mgr. Switchboard Dept., Genl. Elec. Co.
 Williams, Ernest D. (Junior), Turbine Eng. Dept., Genl. Elec. Co.
 Yorkston, John Edward, Engr. in Charge Drafting Dept., Genl. Elec. Co.
- Seneca Falls.**—Gould, Norman J., Pres., Goulds Mfg. Co.
 Payson, T. Elliott, Genl. Supt., The Seneca Falls Mfg. Co.; also, Jersey City, N. J.
 Pomeroy, William D., Genl. Supt., Goulds Mfg. Co.
 Shenberger, Geo. H. (Junior), Goulds Mfg. Co.
 Wadsworth, R. Hollis, 68 Clinton St.
- Slaterville Springs.**—Rites, Francis M., Mech. Engr.
- Solvay.**—Glenn, Chas. Sewell (Junior), Supt. Maintenance, Solvay Process Co.
 Power, Frederick Macy, Orchard Rd.
- Southfields.**—Hall, Dwight Kimball (Junior), Asst. Supt., Frank A. Hall & Sons.
- Spuyten Duyvil.**—Morat, Jacques.
- Syracuse.**—Ahlqvist, Harald, Asst. Mgr. B. C. Dept., Solvay Process Co.
 Barnes, E. Austin, Engr. of Tests, Semet-Solvay Co.
 Bates, Edward P., Prin., 228 W. Water St.
 Blauvelt, Wm. Hutton, Cons. Engr., Semet-Solvay Co.
 Brand, George B., Supt., The Monarch Typewriter Wks., Union Typewriter Co., Inc.
 Brand, Walter N., Supt., Smith Premier Wks.
 Briggs, Arthur J., Mech. Engr., Smith Premier Typewriter Co.
 Brown, Alex. T., Pres., Smith Premier Typewriter Co., Brown-Lipe Gear Co.
 Brown, William Clinton, Ch. Engr., Humphrey Gas Pump Co., S. A. and K. Bldg.
 Bump, Burton Nelson, Engr. of Tests, Solvay Process Co.
 Carhart, Herbert A., Designer, Smith Premier Wks.
 Chambers, F. G., Supt., Straight Line Eng. Co.
 Cogswell, Wm. B., V. P. and Managing Dir., Solvay Process Co.
 Comly, G. Norwood, Soda Ash Dept., Solvay Process Co.
 Comly, Geo. N., 1816 W. Genesee St.
 Cooper, Henry R., Solvay Process Co.

NEW YORK, Syracuse (Continued).

- Cotton, Geo. G., Supt. of Constr., Solvay Process Co.
 Craig, Howard Benton (Junior), Solvay Process Co.
 Diefendorf, Willis H., Ch. Engr., New Process Raw Hide Co.
 Dunkle, H. Edw., Draftsman, Semet-Solvay Co.
 Flannery, John M., Solvay Process Co.
 Fryer, Geo. G., Estimating Engr., The Solvay Process Co.
 Gillis, Albert R., Asst. Engrg. Dept., Solvay Process Co.
 Gordon, Rea M., Asst. Engr. of Tests, Solvay Process Co.
 Griffin, Charles Lewis, Second Asst. Engr., The Solvay Process Co.
 Guelbaum, David, Mech. Engr., P. O. Box 293.
 Hager, Edward C., Engr. in Charge of Power Plants, The Solvay Process Co.
 Herbert, Charles G., First Asst. Engr., The Solvay Process Co.
 Holmes, Arthur (Junior), Engr., H. H. Franklin Mfg. Co.
 Hopton, W. E., Pur. Dept., Solvay Process Co.
 King, Eugene Whittaker, Mech. Engr., Semet-Solvay Co.
 Klock, Frank Barnes, Solvay Process Co.
 Land, Frank, 721 Lodi St.; also, New York.
 Lape, Willard E., Mech. Engr., Syracuse Heater Co., 227 Walton St.
 McFarland, A. R., Wks. Mgr., Solvay Process Co.
 MacCorquodale, Peter H., Asst. Supt., Church & Dwight Co., 1416 Willis Ave.
 Mallory, Charles K., Engr. of Constr. and Maintenance, The Solvay Process Co.
 Merrell, Irving Seaward, V. P. and Mech. Engr., Merrell-Soule Co.
 Miller, Thomas Harrison (Junior), Ch. Draftsman, Semet-Solvay Co.
 Ninde, William Edward, Assoc. Prof. Mech. Engrg., Syracuse Univ.
 Page, Charles E., Genl. Supt., Chase Motor Truck Co.
 Pierce, Edward L., V. P., Semet-Solvay Co., V. P., By-Products Coke Corp., Box 1 and 2.
 Pillmore, Frederick, Mech. Engr., 257 Bryant Ave.
 Pomeroy, Harry D., 384 W. Fayette St.
 Sanderson, Orrin W. (Junior), 905 Walnut Ave.
 Sanford, George Ruggles, Chem. Engr. and Supt. Coke Oven Dept., The Solvay Process Co.
 Singer, Sidney Chas. (Junior), Supt. of Distribution, Syracuse Ltg. Co.
 Stearns, Albert, Supt., Church & Dwight Co., 1416 Willis Ave.
 Sweet, John E., Pres., Straight Line Eng. Co.
 Thompson, Byron Lyman, Asst. Mgr. Caustic Soda Dept., Solvay Process Co.
 Tomlinson, Charles E., Smith Premier Typewriter Co.
 Tracy, Lyndon Sanford (Junior), Mgr. Soda Ash. Dept., Solvay Process Co.
 Trump, Edward N., Genl. Mgr. and Ch. Engr., Solvay Process Co., V. P., Semet-Solvay Co.
 Wilkinson, John, Ch. Engr., H. H. Franklin Mfg. Co.
 Zohe, Ludwig A., Solvay Process Co.
- Tannersville.**—Godfrey, Eli S.
Tarrytown.—Parsons, Frederick W., Supt., Rand Drill Co.

NEW YORK (Continued).

Tompkinsville.—Buckler, Albert H. (Junior), care of Insp., Third Light House Dist.

Reeve, Sidney A., Cons. Engr., 20 Central Ave.

Troy.—Bagg, Samuel F., Dist. Agt., The Fidelity & Casualty Co., Burdett Bldg.

Bradley, Wm. Joseph, Supt., Rail Joint Co.

Caldwell, James Henry, Pres., Genl. Mgr. and Engr., The Ludlow Valve Mfg. Co.

Cluett, Albert Edmund, Mech. Engr., Cluett, Peabody & Co.

Ehrmann, John P. (Junior), Hanna Mfg. Co., Federal and Front Sts.

Foster, C. H., Treas., Tolhurst Mch. Wks.

Green, Arthur M., Jr., Prof. Mech. Engrg., Rensselaer Poly. Inst.

Hammett, Hiram G., Hammett Mch. Wks., 476-482 Eighth St.

Moody, Lewis F., Prof. Hydraulics, Rensselaer Poly. Inst., and Cons. Engr., Hyd. Dept., I. P. Morris Co., of Philadelphia, Pa.

Ricketts, Palmer Chamberlaine, Pres. and Prof. Mechanics, Rensselaer Poly. Inst.

Streeter, Robert Leroy, Asst. Prof. Mech. Engrg., Rensselaer Poly. Inst.

Van Dervort, Adrian O. (Junior), Supt., Hammett Mch. Wks.

Tuckahoe.—Eldred, Byron E., Pres., Commer. Research Co., Lab.

Utica.—Babcock, Stephen E., Mech. and Civ. Engr., 55 Mann Bldg.

Camp, Geo. E., Supt., Foster Bros. Mfg. Co.

Foster, William B., Supt. and Ch. Engr., Foster Bros. Mfg. Co.

Kellemen, H. F., Genl. Mgr., Utica Drop Forge & Tool Co., 800 Whitesboro St.

Munson, Edmund G., Supt. and Secy., Munson Bros. Co.

Vernon.—Mitchell, Samuel Edward, Genl. Supt., Geo. D. Pohl Mfg. Co.

Warsaw.—Pettengill, George D. (Junior), Ch. Draftsman, Warsaw Elev. Co.

Washingtonville.—Howells, Charles, Box 164.

Waterford.—Knickerbacker, John, Pres., Eddy Valve Co.

Watertown.—Eaton, Charles Edwin, Eaton & Brownell, Smith Bldg.

Halladay, Harry F. (Junior), Engrg. Dept., N. Y. Air Brake Co.

Karr, Ernest M. (Junior), Bagley & Sewall Co.

Kinne, Clarence E., Mech. Engr., Bagley & Sewall Co.

Wellsville.—Clark, Charles Ethan, Mfg. Saw Mill Mchy., Steam and Gas Engs., 406 N. Main St.

Clark, Charles Paul (Junior), Clark & Norton Mfg. Co.

Kerr, C. V., Ch. Engr., McEwen Bros.

McEwen, J. H., Pres. and Genl. Mgr., McEwen Bros.

Moore, James Leonard, Ch. Engr., Kerr Turbine Co.

Schaller, Alwin Louis (Junior), Supt., McEwen Bros.

West New Brighton, S. I.—Jones, William Anthony, Mech. Engr., Babcock & Wilcox Co.

Lee, Wm. F., Ch. Engr., C. W. Hunt Co.

Waters, George H., Pres., Waters-Colver Co.

Woodhaven, L. I.—Fritz, Alme L. G. (Junior), Ch. Engr. and Genl. Mgr., L. I. Motor Truck Co., 6 Haven Pl.

NEW YORK (Continued).

- Worcester, Otsego Co.**—Ingersoll, Geo. T., Mech. Engr.
Yonkers.—Buckley, John H., Mech. Engr., Otis Elev. Co.
 Cunningham, Charles G., Engr., N. Y. C. & H. R. R. Co.,
 Yonkers Power Sta.
 Davis, Joseph P., 332 Palisade Ave.
 Freeman, J. Porter, Constr. Engr., Alex. Smith & Sons.
 Hussey, Charles Ward (Junior), 33 St. Andrews Pl.
 Morse, William A., Wks. Mech. Engr., Otis Elev. Co., Wells
 and Woodworth Ave.
 Odell, W. H., Mech. Engr., Spec. Economic Generation and
 Application of Steam, 58 Caroline Ave.

NORTH CAROLINA

- Asheville.**—Waddell, Chas. Edward, Cons. Engr., 78 Patton Ave.
Canton.—Buck, Lucien (Junior), Mech. Engr., The Champion
 Fibre Co.
Charlotte.—Burkholder, Charles Irvine, Genl. Mgr., So. Power Co.
 Klinck, J. Henry, Industrial and Power Dept., Westinghouse
 Elec. & Mfg. Co.
 Lee, William State's, Ch. Engr., So. Power Co., Trust Bldg.
 Mees, Curtis A., Designing Engr., So. Power Co.
 Rucker, B. Parks, Cons. Engr., Commercial Bank Bldg.
 Thompson, Erwin W., Mgr., The Observer Co.
 Tucker, Frank S., Engr., 900 Realty Bldg.
 Whitted, Thomas B., Mech. Engr., Realty Bldg.
Hickory.—Reynolds, Scott (Junior), Salesman and Engr., Latta-
 Martin Pump Co.
North Charlotte.—McKee, Jno. F. (Junior), Mech. Engr., Genl.
 Fire Extinguisher Co.
Pinehurst.—Tufts, Leonard, Owner of Pinehurst, N. C.
Raleigh.—Andrews, Wm. Johnston (Junior), Mech. Engr., 105
 E. North St.
Salisbury.—Henderson, Richard, Capt., U. S. N., Ret., P. O. Box
 285.
West Raleigh.—Ellis, Weldon T., Asst. Prof. Mech. Engrg., N. C.
 College of Agri. and Mech. Arts.
 Satterfield, Howard E., Prof. Mech. Engrg., N. C. College of
 Agri. and Mech. Arts.

NORTH DAKOTA

- Ellendale.**—King, Roy Stevenson.
Grand Forks.—Becker, Albert John, Prof. Applied Mathematics,
 Univ. of N. D.
 Crouch, Calvin H., Dean College of Mech. and Elec. Engrg.,
 Univ. of N. D.

OHIO

- Akron.**—Adams, Edward M., Ch. Engr., Quaker Oats Co.
 Adamson, Cecil F. (Junior), Cons. Mech., Elec. and Rubber
 Engr., 318 Hamilton Bldg.
 Bennett, Thomas Archibald (Junior), Dept. Sales Mgr., The
 B. F. Goodrich Co.
 Grant, Charles C. (Junior), Asst. Mech. Engr., Goodyear Tire &
 Rubber Co.

OHIO, Akron (Continued).

- Preston, Ralph A. D. (Junior), Asst. to Factory Mgr., The Goodyear Tire & Rubber Co.
 Roe, Mark W., Mech. Engr., Diamond Rubber Co.
 Shaw, Edwin Coupland, Second V. P. and Mgr. of Wks., The B. F. Goodrich Co.
 Shelton, William Arnold (Junior), The Goodyear Tire & Rubber Co.
 Truette, Arthur Pierce (Junior), Power Plant Engr., Goodyear Tire & Rubber Co.
Alliance.—Taylor, Clarence L., Ch. Engr., Morgan Engrg. Co.
Barberton.—Langvand, Ivar L., Ch. Draftsman, Babcock & Wilcox Co.
 Smith, William Earhart (Junior), Draftsman, Babcock & Wilcox Co.
Canton.—Harris, Wm. Allison, Mgr., Am. Sheet & Tin Plate Co., Roll and Mch. Wks.
 Lothrop, Marcus T. (Junior), Timken Roller Bearing Co.
Cincinnati.—Ahrens, Geo. Fred, Pres. and Treas., The Ahrens Iron Wks. Co., 3323-3337 Colerain Ave.
 Aull, Jerome J. (Junior), Mech. Engr., Lunkenheimer Co.
 Baldwin, Bert L., Mech. Engr., 72-75 Perin Bldg.
 Brown, Robert Garfield, Instr. Mech. Engrg., Univ. of Cincinnati.
 Cockburn, Francis B., Ch. Draftsman, Lodge & Shipley Mch. Tool Co., 3055 Colerain Ave.
 De Leeuw, Adolph L., Mech. Engr., Cincinnati Milling Mch. Co.
 Diserens, Paul (Junior), Engr. of Tests, Laidlaw-Dunn-Gordon Co.
 Doane, Dr. W. H., 2223 Auburn Ave.
 Du Brul, Ernest F., Pres., Pyro Clay Products Co., 507 E. Pearl St.
 Du Brul, Napoleon, Pres., Miller, Du Brul & Peters Mfg. Co., 507-519 E. Pearl St.
 Egan, Thomas P., Pres., J. A. Fay & Egan, John and Front Sts.
 Elliott, Thomas, Ch. Engr., 1312 Traction Bldg.
 Faig, John T., Prof. Mech. Engrg., Univ. of Cincinnati.
 Fox, Charles H., Pres., Ahrens-Fox Fire Eng. Co., Alfred and Cook Sts.
 Franz, Walter G., Cons. Engr., Union Trust Bldg.
 Freeman, Frederick Charles (Junior), Stacey Mfg. Co.
 Galbraith, Geo. W., Sales Mgr., Internatl. Steam Pump Co., 211 W. 4th St.
 Geier, Frederick August, Pres., The Cincinnati Milling Mch. Co., Oakley.
 Gingrich, Charles Sumner (Junior), The Cincinnati Milling Mch. Co.
 Goldsmith, Nathaniel Oliver, Genl. Mgr., Weir Frog Co., East Norwood.
 Greenman, Edwin G. (Junior), Ch. Draftsman, The Lunkenheimer Co.
 Groene, William F., Ch. Draftsman and Designer, R. K. LeBlond Mch. Tool Co., 4609-4621 Eastern Ave.
 Hazelton, Robert T. (Junior), Cincinnati Milling Mch. Co.
 Hobart, James C., Secy. and Mgr., Triumph Elec. & Ice Mch. Co.
 Hornung, Geo., Cons. Engr., Johnston Bldg.; also, Bellevue, Ky.

OHIO, Cincinnati (Continued).

- Hughes, Burton Shelley, Cons. Engr., 1014 Commercial Tribune Bldg.
- Jenkins, Alexander Lewis (Junior), Assoc. Prof. Mech. Engrg., Univ. of Cincinnati.
- Lane, Harry M., Pres., Lane & Bodley Co., Bond Hill.
- Langen, George, Wks. Mgr., Cincinnati Planer Co.
- LeBlond, John A., Supt., R. K. LeBlond Mch. Tool Co.
- LeBlond, Richard K., Pres., R. K. LeBlond Mch. Tool Co., 4609 Eastern Ave.
- Leeper, Ralph W. (Junior), Genl. Elec. Co., Provident Bank Bldg.
- Lemon, John C., Mech. Engr., 2844 Linwood Ave.
- Lodge, Wm., Pres., Lodge & Shipley Mch. Tool Co., 3055 Colerain Ave.
- Marx, August (Junior), Salesman, G. A. Gray Co., Depot and Gest Sts.
- Marx, Henry, Pres., G. A. Gray Co., Gest and Depot Sts.
- Morris, Thomas Bray (Junior), Mech. Engr., E. K. Morris Co.
- Morrison, William (Junior), Sales Mgr., Highland Body Co., Elmwood Pl.
- Morse, Arthur Holmes, Mech. Engr. and Asst. Supt., The Baldwin Co.
- Moyer, Samuel Lyon (Junior), First V. P., The Lunkenheimer Co., P. O. Box 876.
- Muller, Edward A., Secy. and Mgr., King Mch. Tool Co., Winston Pl.
- Myers, Curtis Clark (Junior), Prof. in Charge of Coördination, Univ. of Cincinnati.
- Norris, Henry McCoy, Mech. Engr., The Cincinnati Bickford Tool Co.
- Pierle, Henry Charles, Spec. Rep. and Engr., The R. K. LeBlond Mch. Tool Co.
- Pollard, Seabury Gould, Cons. Engr., 603 Miles Greenwood Bldg.
- Richter, Ernest, Mech. Engr., The G. A. Gray Co.
- Ritter, Elmer Ralph (Junior), Asst. Mech. Engr., The Lunkenheimer Co., Box 876.
- Ritter, Henry, Supt., The Lunkenheimer Co.
- Robinson, Louis G. (Junior), Louis G. Robinson Lab., Metallurgy and Ceramics, Harrison Bldg.; also, Newport, Ky.
- Simpkinson, Garrett W., Member of Firm, Bert L. Baldwin & Co., 73 Perlin Bldg.
- Springer, John J. (Junior), Sales Engr., Crane Hawley Co., Court and Sycamore Sts.
- Stanley, Frank A., West. Editor, American Machinist.
- Stanwood, J. B., Engr. and V. P., Houston, Stanwood & Gamble Co.
- Stone, Edison H. (Junior), Draftsman, The Lunkenheimer Co.
- Swanberg, F. L. (Junior), Secy., D. T. Williams Valve Co.
- Thullen, L. H., Ch. Engr., Triumph Elec. Co.
- Van Winkle, Herbert H. (Junior), Mech. Engr., John H. McGowan Co., 54 Central Ave.
- Wyatt, Edgar William, The M. Werk Co., Poplar St.
- Cleveland.**—Allen, Albert Mark, Cons. Engr., 1900 Euclid Ave.

OHIO, Cleveland (Continued).

- Anderson, Harold Bentley, Ch. Engr., The Winton Motor Carriage Co.
- Arnold, George, Jr., Cleveland Frog & Crossing Co.
- Balkwill, Stephen, Mech. Engr., Cleveland Frog & Crossing Co.
- Ballard, Frederick W., Engr. of Constr., City of Cleveland Municipal Elec. Light Plant, 319 City Hall.
- Bartol, Geo., Pres., The Otis Steel Co., Ltd.
- Bates, Albert H., Pat. Lawyer, 1028 Society for Savings Bldg.
- Baxter, Burke Morgan (Junior), Mech. Engr. with H. B. Prather, 662 Rockefeller Bldg.
- Bechtel, August L. (Junior), Mech. Engr., The Cleveland Punch & Shear Wks. Co.
- Bidle, William Sanford, Mgr. Turnbuckle Dept., Cleveland City Forge & Iron Co.
- Brown, Will H., Mfr., Rose Bldg.
- Brown, Willard, Ch. Engr. Blast Furnace and Steel Wks., Upson Nut Co.
- Browning, Victor Reed, First V. P., Browning Engrg. Co., Pres., Browning Steam Shovel Co.
- Brush, Charles F., Elec. Engr., 481 The Arcade.
- Cairns, William, Genl. Mgr., The Parish & Bingham Co.
- Carpenter, Alfonso H., care of Estates Dept., The Cleveland Trust Co.
- Carson, Whitfield Robert, Engr., The Grasselli Chem. Co.
- Chace, William W., Mech. Engr., Cleveland Twist Drill Co.
- Chadwick, Lee S., Mech. Engr., Cleveland Fdy. Co. and Cleveland Metal Products Co.
- Cheney, W. L., Sales Mgr., Lucas Mch. Tool Co.
- Clegg, Robert Ingham, Editor *Woodcraft and Castings* V. P., Gardner Ptg. Co., Caxton Bldg.
- Comstock, Charles Warren, Ins., 1104 New England Bldg.
- Cowles, William Barnum, 11,312 Euclid Ave.
- Cox, Jacob Dolson, Pres., Cleveland Twist Drill Co., cor. Lakeside Ave. and E. 49th St.
- Cromwell, J. C., 1410 New England Bldg.
- Croxton, Herbert A., Pres., The Commercial Corp. of Am., 716 Hippodrome Bldg.
- Cunningham, Robert Henry, Jr. (Junior), Engr., Salesman, Ingersoll-Rand Co., 1620 Williamson Bldg.
- Dunbar, James Horace, Mech. Engr., Grasselli Chem. Co.
- Einig, Alvin Bart (Junior), The Motch & Merryweather Mchy. Co.
- Foote, Andrew W., Pres., Foote Burt Co., 4100-4109 St. Clair St.
- Freeman, Perry John (Junior), Browning Engrg. Co.
- Fuller, Benjamin, Delano, Supt. of Foundries, Westinghouse Elec. & Mfg. Co., Cleveland and Allegheny City Wks., Box 382.
- Gaehr, David, Designing and Contr. Engr., 950-952 Rockefeller Bldg.
- Gardner, Andrew J., Jr., Mgr. Ohio Sales Div., Landis Tool Co. of Waynesboro, Pa., Hollenden Hotel; also, Westfield, N. Y.
- Green, James Bale, Ch. Draftsman, Lucas Mch. Tool Co.
- Griess, Justin, Jr., Second V. P., The McMyler Interstate Co.
- Haas, Lucian L. (Junior), Head Tool Designer, The Peerless Motor Car Co.

OHIO, Cleveland (Continued).

- Hale, Herbert Carlton, Dist. Mgr., Ridgway Dynamo & Eng. Co., 1405 Schofield Bldg.
- Harrison, Henry Thomas, Ch. Engr., Corrigan, McKinney & Co.
- Herman, Ludwig, Cons. Engr. and Expt., 7406 Cedar Ave.
- Herron, James H., Cons. Metallurgical Engr., 2041 E. 3d St.
- Hill, Harold H., Mech. Engr., Dist. Mgr., Erie City Iron Wks., 807 New England Bldg.
- Hinchman, C. R., Engr., Am. Steel & Wire Co.
- Honsberg, August A., Mech. Engr., Ret. Sta. B., Box 54.
- Hopkins, Arthur T., Factory Mgr., Mech. Rubber Co.
- Horton, William Miller, Jr. (Junior), Asst. Supt., The Kirk Latty Mfg. Co.; also, Port Chester, N. Y.
- Hulett, Frank E., Engr., Wellman-Seaver-Morgan Co.
- Hulett, Geo. Henry, V. P., Wellman-Seaver-Morgan Co.
- Jones, Edward H.; also Clearwater, Fla.
- Larner, Chester W., Hyd. Engr., Wellman-Seaver-Morgan Co.
- Lees, Ernest J., Pres., The Lees-Bradner Co., 6210 Carnegie Ave.
- Leighton, Edward I., 1183 East Blvd.; also, St. Augustine, Fla.
- Little, Chas. Henry, Mgr., Universal Drafting Mch. Co.
- Lucas, Henry M., Lucas Mch. Tool Co., E. 99th St. and L. S. & M. S. R. R.
- McKechnie, Robert R., Mech. Engr., The Variety Iron & Steel Wks. Co.
- McKee, Arthur Glenn, Cons. and Contr. Engr., 1303 Rockefeller Bldg.
- McNairy, Amos B., Mfr., Hickox Bldg.
- Maltby, Geo. Beecher, Genl. Mgr., The Geo. B. Maltby Co., 719-721 St. Clair Ave., N. E.
- Matthews, John G., Instr. Mech. Drawing, East Tech. H. S.
- Merryweather, Geo. Edmund, Pres., Motch & Merryweather Mchy. Co., 707-715 Lakeside Ave., N. W.
- Mesker, Louis Henry, Ferro Mch. & Fdy. Co.
- Moeller, Franklin, Mech. Engr., Power and Min. Dept., Wellman-Seaver-Morgan Co.
- Morrison, Hunter (Junior), Sales Mgr., Hill Clutch Co.
- Murray, Geo. R., Pres., Murray Stone Co., 914 Williamson Bldg.
- Nesbit, Edwin, Zinc Engr., Grasselli Chem. Co.
- Nickerson, Ralph R. (Junior), Internatl. Steam Pump Co., 306 Rockefeller Bldg.
- Olivebaum, John Emmanuel, Radiographer and Asst. Supt., Lakeside Hospital.
- Palmer, Arthur E. (Junior), Sales Engr., L. G. Finlay & Co., 710 N. E. Bldg.
- Peck, Eugene C., Genl. Supt., Cleveland Twist Drill Co.
- Pitkin, Stephen H., First V. P., Wellman-Seaver-Morgan Co.
- Plantinga, Pierre (Junior), Pres., Gas Mchy. Co., Citizens Bldg.
- Pope, Chas. Edwd., Mech. Engr., Natl. Malleable Castings Co.
- Prather, H. B., Cons. Power, Htg. and Vent. Engr., Rockefeller Bldg.
- Randles, George E., V. P., in Charge of Mfg. and Sales, The Foote-Burt Co.
- Reid, Marcellus, Mech. and Cons. Engr., 506 Caxton Bldg.

OHIO, Cleveland (Continued).

Rider, Geo. Smith, Cons. Engr., Geo. S. Rider & Co., Century Bldg.

Roberts, E. P., Cons. Engr. and Ch. City Smoke Inspr., 1123 Schofield Bldg.

Rodgers, Horace Philip (Junior), Mech. Engr., 2099 E. 71st St.

Rusbatch, Alfred, Supt., Rod Mills, 1786 E. 89th St.

Sague, Samuel Reston (Junior), Sales Engr. Power House Equip., Strong, Carlisle & Hammond Co.

Sessions, Frank Lord, Genl. Supt., The Stand. Welding Co.

Seymour, Niles Edward (Junior), Designing Draftsman of Open Hearth Steel Plants, Wellman-Seaver-Morgan Co.

Sheridan, Richard B., Genl. Mgr., The Brown Hoisting Mchy. Co.

Smead, William H., Mgr. Htg. and Equip. Dept., The Samuel Austin & Son Co., 6408 Euclid Ave.

Smith, Harry J., Wks. Mgr. and Ch. Engr., Hill Clutch Co.

Smith, Roy Harman (Junior), Supt. Natl. Screw & Tack Co.

Stratton, Harry F. (Junior), Genl. Mgr., Elec. Controller & Mfg. Co.

Stratton, James Hughes, Engr. of Constr., Wellman-Seaver-Morgan Co.

Stroud, Edwin G. (Junior), Mgr., Cleveland Engrg. Agency, Pres., E. G. Stroud Co., Rose Bldg.

Swasey, Ambrose, Pres., The Warner & Swasey Co.

Thiemer, William H., M. M., Winton Motor Car Co., Berea Rd.

Valentine, Floyd Herbert (Junior), Constr. Engr. Steam Dept., The Cleveland Elec. Ill. Co.

Vose, Fred Hale, Assoc. Prof. Mech. Engrg. in Charge of Dept., Case Sch. of Applied Science.

Wadsworth, George Reed, Asst. to Pres., Peerless Motor Car Co.

Warner, Worcester R., Pres., Warner & Swasey Co.; also, New York, N. Y.

Wellman, Samuel T., Chairman, Wellman-Seaver-Morgan Co.

West, Thos. D., Iron Fdy. Expt. and Chairman, The West Steel Casting Co., E. 70th St.

Whitlock, Elliott H., Factory Mgr., Natl. Carbon Co.

Wilson, Henry M., Dist. Agt., Pittsburgh Valve, Fdy. & Constr. Co., 978 Rockefeller Bldg.

Wright, Reginald A., Ch. Draftsman Hyd. Dept., Wellman-Seaver-Morgan Co.

Columbus.—Agner, Owen B. (Junior), 909 Wyandotte Bldg.

Andrix, Earl Russell (Junior), Boiler Rm. Foreman, Columbus Ry. & Light Co., Spring St. Power Sta.

Armstrong, Walter J. (Junior), Mech. Engr., Jeffrey Mfg. Co.

Babbitt, Edward F., Engr. with F. L. Packard.

Bailey, Hazil Harding (Junior), Engr., E. W. Clark & Co., 910 Wyandotte Bldg.; also, St. Joseph, Mo.

Banks, Thomas Dent (Junior), Asst. Engr., Dept. Pub. Service.

Bone, Wm. H., V. P. and Genl. Mgr., The Ironsides Co.

Bush, Harold Montfort, Cons. Engr., 136 E. Gay St.

Cole, J. Wendell, Dist. Mgr., William Sellers & Co.'s Grinders, and Detroit Emery Wheel Co., P. O. Box 84.

Colwell, Augustus W., 290 E. 17th Ave.

OHIO, Columbus (Continued).

Cowgill, Paul Everett (Junior), Engr., Central Union (Bell) Tel. Co.

Craiglow, Harry H. (Junior), Plant Engr., The Buckeye Steel Castings Co.

Dennis, Basil Wrenn (Junior), Engr., E. M. Clark Co., 910 Wyandotte Bldg.

Fitz, Ervin M. (Junior), Elec. Engr., M. P. Dept., Pa. Lines West of Pittsburgh, New First Natl. Bank Bldg.

Frankenberg, George T., Supt., The Columbus Brass Co., 540 Dublin Ave.

Hitchcock, Embury A., Prof. Exper. Engrg., Ohio State Univ.
Ives, Frederick Walter (Junior), Instr. Engrg. Drawing, Ohio State Univ.

Judd, Horace, Assoc. Prof. Exper. Engrg., Ohio State Univ.

Magruder, Wm. T., Prof. Mech. Engrg., Ohio State Univ.

Renner, Roland B. (Junior), Mech. Engr., Jeffrey Mfg. Co.

Riddle, Howard Sterling, V. P., Weinman Pump Mfg. Co.

Sanborn, Frank Edwin, Prof. Industrial Arts, Ohio State Univ.

Smith, Roy B. (Junior), Asst. M. P. Inspr., Pa. Lines West.

Wyer, Samuel S., Cons. Mech. Engr., Harrison Bldg.

Conneaut, Ashtabula Co.—Brown, J. Linwood, Mech. and Cons. Engr., R. F. D. No. 1.

Fickinger, P. J., Mech. Engr., P. & C. Dock Co.

Dayton.—Bridenbaugh, Elmer Henry, Mech. Engr. and Asst. Supt., Ohmer Fare Register Co.

Buvinger, George A., V. P. and Engr., Dayton Turbine Pump Co., 713 Schwind Bldg.

Canby, Harry Beaver (Junior), Second V. P., Crawford, McGregor & Canby Co.

Chambers, William George, Ch. Engr., The Natl. Cash Register Co.

Deeds, Edward Andrew, V. P., Natl. Cash Register Co., and Pres., The Dayton Engrg. Laboratories Co.

Fassett, Francis Keith, Inventor, Designer and Pat. Atty., 1309 U. B. Bldg.

Fogarty, William James, Mech. Engr., Barney & Smith Car Co.

Martin, Haakon A., Head Invention 5, Natl. Cash Register Co.

Ripsch, Charles William (Junior), Mech. Engr., Recording & Computing Mchs. Co.

Rowe, Don Ray (Junior), Ch. Draftsman, The Noyes Mfg. Co., cor. 5th and Norwood Ave.

Schneble, Rudolph G., Cons. Mech. Engr., 1627 E. 3d St.

Sturgess, John, Secy., The Platt Iron Wks. Co.

Vaile, J. Henry, Pres. and Treas., Vaile & Kimes.

Yates, R. L. (Junior), Mgr. and Ch. Engr. Waterwheel Dept., The Platt Iron Wks. Co.

East Cleveland.—Miller, Walter, 24 Rosemont Rd.

Elyria.—Gray, William Emery, Genl. Sales Mgr., The Enameled Pipe & Engrg. Co.

Martell, Louis H., Specialist in Metal Packings.

Nailler, Raymond Frederick, Pres. and Genl. Mgr., The Enameled Pipe & Engrg. Co.

Piercy, Edgar, 282 Washington Ave.

Hamilton.—Ayers, Norwood B., Mech. Engr., Champion Coated Paper Co.

OHIO, Hamilton (Continued).

- Cullen, James K., Pres., The Niles Tool Wks.
 Griffin, Michael E., Selling Engr., The Hooven, Owens, Rentschler Co.
 Helvey, Clarence H. (Junior), Sales Engr., 303 N. 2d St.
 Helvey, George Stanley (Junior), Secy and Treas., Miami Fdy. Co.
 Holman, R. Claude, Genl. Supt., The Hooven, Owens, Rentschler Co., P. O. Box 385.
 Kutter, H. L., Secy., Sales Mgr. and Engr., The Black-Clawson Co.
 Mayo, Wm. Benson, Secy. and Genl. Mgr., The Hooven, Owens, Rentschler Co.
 Reiss, George T., V. P., Niles Tool Wks.
 Rentschler, Gordon Sohn (Junior), V. P. and Fdy. Mgr., The Hamilton Fdy. & Mch. Co.
 See, James W. Mech. Engr., Rentschler Bldg.
 Stacks, H. Roy, Supt., The Black-Clawson Co.
 Trowbridge, Francis C. (Junior), Pres. and Genl. Mgr., The Black-Clawson Co.
 Wood, Augustus, Ch. Draftsman, Niles Tool Wks. Co.
- Hillsboro.**—Shirley, Loyd Emmet, Supt., The C. S. Bell Co.
- Ivorydale.**—Anderson, Robert, Ch. Engr., Proctor & Gamble Co.
 Manley, Summer M. (Junior), Asst. Mech. Engr., The Proctor & Gamble Mfg. Co.; also, Kansas City, Mo.
- Lexington.**—Smith, Harry Ford, Secy. and Genl. Mgr., Smith Gas Power Co.
- Lima.**—Buckley, John Francis, Genl. Mgr., Buckley Spec. Co.
 Wall, Geo. L., V. P., Lima Loco. Corp.
 Werst, Chas. Wm., Supt., Lima Loco. & Mch. Co.
- Lorain.**—Lundgren, Charles G., M. M., Natl. Tube Co.
 Suppes, Max M., The Natl. Tube Co.
 Waterman, Fred Walter, Mech. Engr., The Natl. Tube Co.
- Mt. Vernon.**—Thomas, Fred H. (Junior), Sales Engr., The C. & G. Cooper Co.
- Mansfield.**—Brown, John Rowland, Mech. Engr., Ohio Brass Co.
- Marion.**—King, Charles B., Ch. Engr., The Marion Steam Shovel Co.
- Massillon.**—Garrigues, Edmund, Ch. Engr., The Russell & Co.
 Heggem, Charles O., Genl. Supt., The Russell & Co.
- Miamisburg.**—Carpenter, Charles U., Pres., Fire-Proof Furniture & Constr. Co.; also, V. P., The Republic Motor Car Co., Hamilton.
- Mingo Junction.**—McGee, Frank Raymond, Mech. Engr., Mingo and Bellaire Wks., Carnegie Steel Co.
 Tipton, William Howard (Junior), Steam Engr., Mingo and Bellaire Wks., Carnegie Steel Co.
- Norwood.**—Curtis, Edma H., Jr. (Junior), Mech. Engr., 1981 Cleneay Ave.
 Hecker, H. A., 2032 Elm Ave.
 Stutz, C. C., Cons. Engr., 3830 Forest Ave.
- Nottingham.**—Mitchell, William Clark.
- Piqua.**—Hartley, Harry Dwight (Junior), Pioneer Pole & Shaft Co.
- Portsmouth.**—Barrett, Dwight Orion (Junior), Heer Eng. Co.

OHIO, Portsmouth (Continued).

Baum, Robert Stanton (Junior), Supt., The Heer Eng. Co.
York, L. D.

Salem.—Cooper, Geo. S., Mech. Engr., Buckeye Eng. Co.

Emeny, Fred'k James, Ch. Engr., The Deming Co.

Hunt, Charles B., Supt. of Constr., Buckeye Eng. Co.

Mansfield, Albert K., Cons. Engr., 283 Lincoln Ave.

Weeks, Charles H., V. P., Buckeye Eng. Co.

Sandusky.—Millspaugh, William H., Pres., Sandusky Fdy. & Mch. Co.

Springfield.—Bauer, Chas. L., Pres., The Bauer Bros. Co.

Bayley, W., Pres. and Ch. Engr., The Wm. Bayley Co.

Hoppes, John J., Pres., Hoppes Mfg. Co., and Trump Mfg. Co.

Kelly, O. W., Pres., O. S. Kelly Co.

Perks, George W., Supt., Am. Seeding Mch. Co.

Shouvlin, Patrick J., Prop., Superior Gas Eng. Co.

Toledo.—Boblett, Kinderman M., Radiator Expt., The Kinsey Mfg. Co.

Calder, C. B., V. P. and Genl. Mgr., Toledo Ship Bldg. Co.

Gates, John George (Junior), Engrg. Dept., Toledo Mch. & Tool Co.

Hallenbeck, George E., Genl. Supt., Baker Bros., Post St. and Westlake Ave.

Hinde, Louis Joseph, Secy., The Toledo Mch. & Tool Co.

Rathbun, Edward, Second V. P., Rathbun-Jones Engrg. Co., Spencer St.

Rathbun, Geo. Jay, V. P. and Engr., Rathbun-Jones Engrg. Co.

Smith, Ellis Burton (Junior), Supt. Toledo Lamp Wks., Genl. Elec. Co.

Smith, Persifor Frazer, Jr., Supt. M. P., Pa. Lines, 1036 Ohio Bldg.

Yaryan, Homer T., V. P., The Yaryan Naval Stores Co.

Warren.—Gorton, J. C., Cons. Engr., 210 Olive St.

West Austintown.—Jett, Carter C. (Junior), Ch. Draftsman, Pittsburgh Crucible Steel Co.

Wickliffe.—Robbins, C. C., Secy. and Genl. Mgr., The Cleveland Crane & Engrg. Co.

Xenia.—Garfield, Lyman Morse, Supt., Miami Powder Co.

Youngstown.—Bixler, Harry Z., Ch. Engr., The Brier Hill Steel Co.

Bray, Thos. Jos., Pres., Republic Iron & Steel Co.

Helander, Axel. H., Sales Mgr. and Cons. Engr., The William Tod Co.

Kirkevaag, Peter, 711 Elm St.

Pinger, George C. (Junior), Engr., The West. Conduit Co., 516 Stambaugh Bldg.

Robinson, C. Snelling, Second V. P., Youngstown Sheet & Tube Co.

Rust, William F., Ch. Engr., Youngstown Sheet & Tube Co.

Wear, Burt C. (Junior), Youngstown Sheet & Tube Co.

Wick, Henry, 710 Dollar Savings & Trust Co. Bldg.

Wilson, Robert Alexander (Junior), Ohio Wks., Carnegie Steel Co.

Woodard, Louis A., V. P. and Genl. Mgr., The William Tod Co.

Young, John P., Pres., Reinforced Tile Roof Co., Box 43.

Zanesville.—McCoy, William (Junior), Mech. Engr., Am. Ep-caustic Tiling Co.

OKLAHOMA

- Stillwater.**—Chandler, Richard Edward, Dean of Engrg., Okla. Agri. and Mech. College.
Tulsa.—Church, Maynard D., Supt., McEwen Co.

OREGON

- Corvallis.**—Graf, Samuel Herman (Junior), Instr. in Mech. Engrg., Ore. Agri. College.
Fife.—Baender, Fred. Geo. (Junior).
Klamath Falls.—Case, Theo. Newton.
Medford.—Steenstrup, P. S., Pres., Pacific Motor Supply Co., 220 W. Main St.
Nehalem.—Reed, Samuel Gordon (Junior), Pres., Neahkahnie Mountain Land Co.
Oswego.—Gilbert, Lloyd Damond, Pres., Acting as Ch. Engr., Cement Engrg. Co.
Portland.—Ball, Bert Chas., V. P. and Genl. Mgr., Willamette Iron & Steel Wks.
 Grelle, Charles Edward (Junior), Pres. and Mgr., Independent Fdy. Co., 23d and York Sts.
 Hill, Benjamin Wood (Junior), Hill Military Academy.
 Lazell, Ellis Warren, Cons. Engr., Edwards & Lazell, 426 Ry. Exch. Bldg.
 Sweet, Franklin (Junior), 603 E. Main St.
 Warren, Walter B., V. P., Warren Bros. Co., 711 Journal Bldg.

PENNSYLVANIA

- Allentown.**—Douglass, Wm. M., Treas., Globe Real Estate Co., 18 S. 6th St.
 Robinson, H. B., Mech. Engr., Supt. of Shops, Allentown Rolling Mills.
Altoona.—Dunbar, William Otis, Asst. Engr. Test Dept., Pa. R. R.
 Kiesel, William Frederic, Jr., Asst. Mech. Engr., Pa. R. R., 12th Ave. and 12th St.
 Koch, George B., Asst. Genl. Foreman, South Altoona Foundries, Pa. R. R. Co.
 Rhoads, George Elwood (Junior), Asst. Foreman Loco. Test Plant, Pa. R. R.
 Wallis, James T., Genl. Supt. M. P., Pa. R. R., Lines East of Pittsburgh.
 Wood, Benjamin F., Asst. Engr. M. P. Dept., Pa. R. R. Co.
 Yoder, Jacob Herbert (Junior), Instr., Sch. for Apprentices, Pa. R. R. Co.
 Young, Chas. D., Engr. of Tests, Pa. R. R. Co.
Ambridge.—Bernard, James L., Mech. Engr., Am. Bridge Co.
Ardmore.—Slaughter, Benjamin Gabriel, Jr., Cons. Engr. with Utley Wedge, 126 Athens Ave.
Aspinwall.—Smith, George Hampton, Asst. to Ch. Engr. Pittsburgh Furnaces, Carnegie Steel Co.
Bath.—Franks, Fredk. B., Mgr., Operating and Constr. Cement Plant, Bath Portland Cement Co.
Beaver Falls.—Oatman, Paul Bartlett (Junior), Mgr., Ideal Tool & Mfg. Co.
 Towne, Thos., Genl. Mgr. of Sales, Union Drawn Steel Co.

PENNSYLVANIA, Beaver Falls (Continued).

- Wendell, Henning Gabriel, Ch. Engr., Asbestos Protected Metal Co.
- Bethlehem.**—Brunner, Roy Samuel, Asst. Ch. Engr., Didler-March Co.
 Butterfield, Thomas E., Cons. Engr. and Gas Power Specialist, 138 S. New St.
 Fritz, John, Cons. Engr., 155 Market St.
 Nagle, A. F., Cons. Engr., 22 S. High St.
 Newbury, George K. (Junior), Packer Ave., W. S.
 Sheldon, Samuel B. (Junior), Cons. Engr., 117 Church St.
- Braddock.**—Chess, Harvey B., Jr. (Junior), Pres., The Consltd. Expanded Metal Cos.
 Danks, Alfred C. (Junior), Ch. Engr. Gas Engs., Edgar Thomson Wks., Carnegie Steel Co.
- Bradford.**—Müllhaupt, Alfred, Jr. (Junior), Mech. Engr., Corliss Carbon Co.
 Rose, John H., Secy. and Genl. Mgr., Bradford Elec. Light & Power Co.
- Bridgeport, Montgomery Co.**—Bray, Charles W., R. D. No. 1.
- Bridgeville.**—Ferrier, Walter, Asst. Supt., Am. Vanadium Co.
- Bristol.**—Dodds, Wm. E., Genl. Mgr., Stand. Cast Iron Pipe & Fdy. Co.
- Brookville.**—Jenks, William H.
- Butler.**—Christianson, Andrew, Ch. Engr. Engrg. Dept., Stand. Steel Car Co.
 Sutherland, James I. (Junior), Estimator, Stand. Steel Car Co.
- Carbondale.**—Hamilton, Wm. Juel, Secy., Hendrick Mfg. Co.
 Hiller, N. H., Pres., Carbondale Mch. Co.
 Trautwein, Alfred P., V. P., Am. Welding Co.
- Catasauqua.**—Brodhead, Alex. L. (Junior), Cons. Engr.
 Fuller, Col. James Wheeler, Jr., Pres., Lehigh Car, Wheel & Axle Wks.
- Chester.**—Stevenson, William Alston, Mgr., Keystone Drop Forge Wks.
- Coatesville.**—Entrekin, Norman Reese, Genl. Supt., Worth Bros. Co.
 Haldeman, Paul Collins (Junior), M. M., Lukens Iron & Steel Co.
 Huston, Charles L., V. P. and Wks. Mgr., Lukens Iron & Steel Co., and V. P. and Wks. Mgr., Jacobs-Shupert U. S. Fire Box Co.
- Conshohocken.**—Logan, John W., Mgr. Steel Wks. Dept., Allan Wood Iron & Steel Co.
- Crafton.**—Ashworth, Daniel, Cons. Engr., 67 W. Ridge Ave.
- Crum Lynne.**—Rogers, John I. (Junior), Eagan-Rogers Steel & Iron Co.
- Darby.**—Vosbury, W. DeWitt, Mech. Engr., P. O. Bldg.
- Dunbar.**—Caris, Ivan Burdell, Asst. M. M., Semet-Solvay Co.
- Duquesne.**—Ahlen, William, Ch. Engr., Duquesne Steel Wks., Carnegie Steel Co.
 Bailey, H. Morell (Junior), Safety Inspr., Carnegie Steel Co.
- East Downingtown.**—Standley, Albert H. (Junior), V. P. and Genl. Supt., Downingtown Mfg. Co.
- East Pittsburgh.**—Bathgate, Owen Hamill, Wks. Steam Engr., Westinghouse Elec. & Mfg. Co.

PENNSYLVANIA, East Pittsburgh (Continued).

- Flint, William P., Engr. Gas Eng. Dept., Westinghouse Mch. Co.
 Herr, Edwin M., Pres., Westinghouse Elec. & Mfg. Co.
 Herr, Herbert T., V. P. and Genl. Mgr., The Westinghouse Mch. Co.
 Hodgkinson, Francis, Mech. Engr., Westinghouse Mch. Co.
 Johnson, Charles W., Genl. Supt., Westinghouse Elec. & Mfg. Co.
 Kaup, Wm. Joseph, Genl. Supvr. Small Tools, Westinghouse Elec. & Mfg. Co.
 Longwell, Henry E., Cons. Engr., Westinghouse Mch. Co.
 Mills, Chester B., Mech. Engr. in Charge of Drafting Room, Westinghouse Elec. & Mfg. Co.
 Norris, Edson R., Dir. of Mfg. Operations, Westinghouse Elec. & Mfg. Co.
 Pulis, Wm. Eugene (Junior), Industrial Engr., Westinghouse Elec. & Mfg. Co.
 Rose, E. Ernest (Junior), Engr., Westinghouse Elec. & Mfg. Co.
 Taylor, Alexander, Mgr. of Wks., Westinghouse Elec. & Mfg. Co.
 Thomas, Jay G. (Junior), Engrg. Dept., Westinghouse Mch. Co.
 Valentine, Warren P. (Junior), Engrg. Dept. and Charge of Mech. Drawing Dept., Trades Apprentice Sch. of Westinghouse Elec. & Mfg. Co.
- Easton.**—Brown, Gabriel Scott, Second V. P., Alpha Portland Cement Co.
 Dunn, William Robert, Wks. Mgr., Vulcanite Portland Cement Co.
 Farrell, W. Elliston, V. P., Treadwell Engrg. Co.
 Firmstone, Frank.
 Jackson, Charles J., Secy. and Genl. Mgr., Easton Tool & Mch. Co., 39-41 N. Sitgreaves St.
 Sherrerd, John Maxwell, 340 Spring Garden St.
 Tydeman, William A. (Junior), Secy., Macan Jr. Co.
- Eddystone.**—Albrecht, Otto., Mech. Engr., Tindel Morris Co.
 Austin, William F., Supt., Eddystone Plant, Belmont Iron Wks.
- Edgeworth, Allegheny Co.**—Shields, William D. (Junior).
- Ellwood City, Lawrence Co.**—Smith, Howard Wells (Junior), Ch. Engr., Stand. Eng. Co.
 Stiefel, Ralph C., Mech. Engr.
- Erie.**—Armstrong, E. J., Engr., Ball Eng. Co.
 Behrend, Ernst Richard, Pres. and Genl. Mgr., Hammermill Paper Co.
 Chatain, Henri George, Engr. Gas Eng. Dept., Genl. Elec. Co.
 Childs, Eugene, Rep., Gath Mch. Tool Co., 1016 Parade St.
 Conrader, Rudolph, 708 Parade St.
 Conrath, George B., Genl. Mgr., Nagle Corliss Eng. Wks.
 Gamper, Herman, Genl. Mgr., Erie Ltg. Co.
 Germain, Joseph Napoleon, Mech. Engr. of Maintenance, Genl. Elec. Co.
 Jarecki, Alexander, Secy., Jarecki Mfg. Co.
 Kessler, Armin Geo. (Junior), Mgr., Lakeside Forge Co.
 Smith, Mark Elmer (Junior), Mgr. and Owner, Irwin's Garage, 513-515 French St.
 Stevens, R. C., Ch. Engr., Skinner Eng. Co.

PENNSYLVANIA, Erie (Continued).

- Wright, Ross Pier, Secy. and Treas., Reed Mfg. Co.
- Fombell, Beaver Co.**—Ruth, Wilbur M.
- Frankford.**—Brown, Walter E. (Junior), 1656 Granite St.
- Franklin.**—Carew, Clement J., V. P. and Mgr., Venango Mfg. Co.
Grieves, E. W., Mech. Expt., Galena-Signal Oil Co.; also, Baltimore, Md.
- Haskell, Broderick, Miller Park.
- Sedgwick, Edw. V., Mgr. Exper. Dept., Galena-Signal Oil Co.
- Fullerton.**—Stubblebine, Winfred A., Engr., The Lehigh Fdy. Co.
- Galeton.**—Darlow, A. M. (Junior), Supt. M. P., Buffalo & Susquehanna R. R.
- Greenville.**—Albridge, Frederick Royal, Ch. Draftsman, Bessemer & Lake Erie R. R.
- Grove City.**—Hüttinger, Wm. R. (Junior), Asst. Engr., Bessemer Gas Eng. Co.
- Harrisburg.**—Allen, Benj. T., Ch. Engr., Harrisburg Fdy. & Mch. Wks.
MacKenzie, William Percival, Treas. and Genl. Mgr., Harrisburg Fdy. & Mch. Wks.
- Hollidaysburg.**—Kirk, William Fell, Mgr., McLanahan-Stone Mch. Co., 1005 Allegheny St.
- Johnstown.**—Bradshaw, Grant D. (Junior), Steam Engr., Cambria Steel Co.
Clarke, Charles Edwin (Junior), Designer Mech. Engrg. Dept., Cambria Steel Co.
Geer, James H., Engr. of Constr., Cambria Steel Co.
Gocher, John W., Ch. Engr., Cambria Steel Co.
Marshall, Stewart McCulloch, Ch. Engr., Cambria Steel Co.
Morgan, Joseph, Cons. Engr., Cambria Steel Co.
Ottinger, Harry (Junior), M. M., Franklin Open Hearth Dept., Cambria Steel Co.
Shepherdson, John William, Asst. Ch. Engr., Cambria Steel Co.
Stuart, Milton Caleb (Junior), Asst. Steam Engr., Cambria Steel Co.
Swarts, Guy Taylor (Junior), Repair Wk., Open Hearth Dept., Cambria Steel Co.
Webster, William Ralph, Designer in Charge Checking Dept., Cambria Steel Co.
- Koppel.**—Ellis, Humphrey Alfred, Genl. Supt., Orenstein-Arthur Koppel Co.
- Lancaster.**—Vandergrift, James W., V. P., So. Pipe Line Co.
- Lansford.**—Leaman, Charles Henry (Junior), Mech. Engr., Lehigh Coal & Navigation Co.
- Lebanon.**—Crowell, William Jas., Jr. (Junior), Chem. Engr., Gas and Test Engr., Am. Iron & Steel Mfg. Co.
- Lititz.**—McCarte, Alexander James (Junior), Mech. Engr., Ideal Cocoa & Chocolate Co.
- McKeesport.**—Cornelius, William A. (Junior), Mgr., Natl. Tube Co., Natl. Wks.; Genl. Mgr., McKeesport Connecting R. R.
Hoerr, Alexander L., Steam and Hyd. Engr., Natl. Tube Co., Natl. Wks.
Leahy, Frank E. (Junior), Asst. Steam and Hyd. Engr., Natl. Tube Co.
McCulloch, John A., Engr. Galvanizing Plant, Natl. Wks., Natl. Tube Co.

PENNSYLVANIA, McKeesport (Continued).

- Saunders, A. M., Supt., Natl. Tube Co.
 Snyder, George T., Mech. Engr. Natl. Wks., Natl. Tube Co.
 Utley, Joseph Cole (Junior), Steam and Hyd. Engrg. Dept., Natl. Tube Co.
- McKees Rock.**—Lindstrom, Charles A., Ch. Engr., Pressed Steel Car Co., and West. Steel Car & Fdy. Co. of Chicago, Ill.
 Lockwood, Burns D., Asst. Ch. Engr., Pressed Steel Car Co.
- Media.**—Wood, William H., Engr., and Bldr. of Spec. Mchy., 10 South Ave.
- Middletown.**—King, George I., Ch. Engr., Middletown Car Co.
- Midland.**—Baltzell, W. H., Ch. Engr., Pittsburgh Crucible Steel Co.
- Munhall.**—McCollum, Caleb Addison (Junior), Exper. Engr., Carnegie Steel Co., Homestead Steel Wks.
 Parsons, William Claude (Junior), Blast Furnace Draftsman, Carnegie Steel Co., Homestead Steel Wks.
- Nazareth.**—Brobston, Joseph, Mgr., Dexter Portland Cement Co.
 Wolfe, Elvin A., Supt., Penn-Allen Cement Co.
- Northampton.**—Croll, A. Gilbert, Asst. Genl. Supt., The Atlas Portland Cement Co., and Supt., Northampton & Bath R. R.
- Northumberland.**—Sumner, Eliot, King St.
- Oakmont.**—Duden, Emil G. (Junior), Ch. Engr., W. B. Scaife & Sons Co.
- Oil City.**—Gnade, Edward R., Wks. Mgr., Oil Well Supply Co.
 Gunagan, Richard Henry, Supt., Natl. Transit Co. Shops.
 Platt, Wilber O., V. P. and Supt., Jos. Reid Gas Eng. Co.
 Reid, Joseph, Pres., Joseph Reid Gas Eng. Co.
 Steen, Arthur B., Mgr., Natl. Transit Co. Shops
 Weymouth, Thomas Rote, Ch. Engr., United Natural Gas Co., 206 Seneca St.
 White, George Henry, Supt., Oil City Boiler Wks.
- Palmerton.**—Donaldson, Stuart A. (Junior), Engr., New Jersey Zinc Co.
 Layat, Felix, Mech. Engr. and Ch. of Wks. Constr. Dept., N. J. Zinc Co.
- Pencoyd.**—Rupp, M. E. (Junior), Inspec. Engr. East. Div. Isthmian Canal Com., care of Am. Bridge Co.
- Philadelphia.**—Allison, John Franklin (Junior), Mech. Engrg. Dept., Univ. of Pa.
 Atterbury, Wm. Wallace, V. P. in Charge of Operation, Pa. R. R. Co., Broad St. Sta.
 Bailey, William J. (Junior), Mech. Engr., United Coal Co., Pa. Bldg.
 Bancroft, J. Sellers, Genl. Mgr. and Mech. Engr., Lanston Monotype Mch. Co., 24th and Locust Sts.
 Bancroft, Wilfred, Sales Mgr., Lanston Monotype Mch. Co., 24th and Locust Sts.
 Barnes, Arthur F. (Junior), Instr. in Mech. Engrg., Univ. of Pa.
 Barth, Carl G., Cons. Engr., 6151 Columbia Ave., Overbrook.
 Batt, William Lorraine (Junior), Ry. Engr., The Hess-Bright Mfg. Co., Front St. and Erie Ave.
 Beecher, J. F., United Gas Improvement Co.
 Benner, Henry Lewis (Junior), Engr., Hess-Bright Mfg. Co.
 Bilgram, Hugo, Machinist, 1235 Spring Garden St.

PENNSYLVANIA, Philadelphia (Continued).

- Birkinbine, John, Cons. Engr., Parkway Bldg., Broad and Cherry Sts.
- Blatchley, Chas. A., Mech. Engr., 1052 Drexel Bldg.
- Bonzano, Adolphus, Pres., Bonzano Rail Joint Co., Pa. Bldg. 15th and Chestnut Sts.
- Borden, John Morrow (Junior), Draftsman, 4622 Wayne Ave., Germantown.
- Bright, Holstein De Haven, Pres., Southwark Fdy. & Mch. Co., Washington Ave. and 5th St.
- Brown, Richard P. (Junior), Pres., Brown Instrument Co., 9th St. and Montgomery Ave.
- Bruegel, A. Theodore, Secy. and Dir., The Hess-Bright Mfg. Co., Front St. and Erie Ave., Sta. E.
- Budd, Edward G., Pres., Edward G. Budd Mfg. Co., Ontario and I St.
- Bullock, Samuel A., Engr., Baldwin Loco. Wks., 500 N. Broad St.
- Burnham, Wm., Pres. and Treas., Stand. Steel Wks. Co., Morris Bldg.
- Burton, Isaac Francis, Supt., Victor Talking Mch. Co.
- Carpenter, Charles A. (Junior), Sales Dept., S.K.F. Ball Bearing Co.
- Carter, Emmett B., Ch. Engr., Midvale Steel Wks.
- Champion, Harry W., Pres., Newton Mch. Tool Wks., Inc., 24th and Vine Sts.
- Chance, Thomas Mitchell (Junior), Min. Engr. with H. M. Chance as Asst. in Genl. Cons. Practice, 837 Drexel Bldg.
- Cheney, Algernon R., Supt. of Operation, Philadelphia Elec. Co., 28th and Christian Sts.
- Child, Stanley G., Foreman of Mch. Shop, Baldwin Loco. Wks.
- Childs, Harold P. (Junior), Mgr., Phila. Office, Westinghouse Mch. Co., North Am. Bldg.
- Clark, Walton, Second V. P., United Gas Improvement Co., Broad and Arch Sts.
- Coburn, Frederic G. (Junior), Asst. Naval Constr., U. S. N., Shop Supt., Navy Yard, Hull Div.
- Converse, Bernard T., Engr. of Plant, Baldwin Loco. Wks., 500 N. 15th St.
- Cooke, Morris Llewellyn, Dir. of Pub. Wks., City Hall.
- Crofoot, George Emerson (Junior), Instr. Engrg. Dept., Univ. of Pa.
- Dallett, Elijah, Mech. Engr., Midvale Steel Co.
- Dallett, W. P., Hyd. Engr. and Contr., 49 N. 7th St.
- Daugherty, Frank (Junior), V. P., Scofield Engrg. Co., 1324 Arcade Bldg.
- Davis, Leon Keith, Mgr. Fire Prevention Dept., Hutchinson & Rivinus, 425 Walnut St.
- Dawes, Robert, V. P. and Supt., Haskell, Dawes Mch. Co., Erie and Trenton Aves.
- Day, Charles, Member of Firm, Day & Zimmermann, Washington Bldg., 608 Chestnut St.
- Dodge, James Mapes, Chairman of Bd., Link-Belt Co., Nicetown.
- Dodge, Kern, Cons. Engr., Morris Bldg., 1421 Chestnut St.

PENNSYLVANIA, Philadelphia (Continued).

- D'Olier, William Livingston, Pres., D'Olier Engrg. Co., 1804 Morris Bldg.
- Douglas, Edwin Rust, Cons. Engr.
- Earle, Edgar P., Pres., Earle Gear & Mch. Co., Stenton and Wyoming Aves., Wayne Junction.
- Easby, Francis H., 3316 Powelton Ave.
- Ehlers, Henry Edward, Prof. Exper. Engrg., Univ. of Pa.
- Ehlers, Peter, Ch. Engr., Wm. I. McCahan Sugar Refining Co., foot of Tasker St.
- Ely, Theo. N., Ch. of M. P., Pa. R. R., Ret.
- Evans, Henry O., Contr. and Designing Engr., Automatic Mchy.; M. E. Abram Cox Stove Co.
- Evans, William Penn, Mech. Engr., Baldwin Loco. Wks.
- Eynon, Thomas M., Pres., Eynon-Evans Mfg. Co., 15th and Clearfield Sts.
- Felton, Edgar Conway, Pres., Pa. Steel Co., Morris Bldg.
- Fernald, Robt. H., Whitney Prof. Dynamical Engrg., Univ. of Pa., and Cons. Engr., U. S. Bureau of Mines.
- Firth, William Edgar, Safety Engr., Midvale Steel Co., Box 1606.
- Fischer, Ad. Koerting, Pres., Schutte & Koerting Co., 12th and Thompson Sts.
- Flagg, Stanley G., Jr., S. G. Flagg & Co., Morris Bldg., 1421 Chestnut St.
- Ford, Bruce, Engr., Elec. Storage Battery Co., 19th St. and Allegheny Ave.
- Francis, Isaac Hathaway, Cons. Engr., 1508 Commonwealth Trust Bldg.
- Francis, W. H., Union League, Broad and Sansom Sts.
- Fuller, Allen Jenckes, Supt., Bureau of Water, City Hall.
- Fulweiler, John Edwin (Junior), Member of Firm, Perkins, Fulweiler & Co., 400 Chestnut St.
- Gibson, Jas. Edwin, Prin. Asst. Engr., Am. Pipe & Constr. Co., 112 N. Broad St.
- Giele, Walter S. (Junior), Harrison Safety Boiler Wks.
- Gilmer, G. Walker, Jr., Mfr., 52 N. 7th St.
- Goetz, Victor J. (Junior), Refrig. Engr. and Contr., Rep., Brunswick Refrig. Co., 345 N. 12th St.
- Green, John Stevenson (Junior), Eddystone Dept., Baldwin Loco. Wks.
- Green, Thomas Wilbraham, Mech. Engr., 3465 Frankford Ave.
- Hagman, W. J., Genl. Mgr., Bement-Miles Wks., 21st and Cal-lowhill Sts.
- Hagy, J. Lawrence (Junior), 1525 Montgomery Ave.
- Haines, Edward Preston, Ch. Engr., Steam Eng. Dept., The Sun Power Co., Tacony.
- Halsey, Jas. T., Mech. Engr., 1347 Noble St.
- Hand, Francis Ludlam, 1948 N. 18th St.
- Hansell, William H., Pres., Smith & Hansell, Inc., Philadelphia Iron Fdy., 1625-1635 N. 5th St.
- Harding, James Morgan (Junior), Engr., Dodge Mfg. Co., 815 Arch St.
- Harvey, Minor, Engr., Hindley Worm Gear Dept., Otis Elev. Co., 1105 Frankford Ave.
- Hathaway, H. K., Cons. Engr., 7215 Creshiem Rd., Mt. Airy.

PENNSYLVANIA, Philadelphia (Continued).

- Henderson, Geo. R., Cons. Engr., The Baldwin Loco. Wks., 500 N. Broad St.
- Hess, Henry, 1510 W. Allegheny Ave.
- Hiller, Joseph Lilburne, Ch. Engr., Pa. Crusher Co., Stephen Girard Bldg.
- Houskeeper, William G. (Junior), 3508 Baring St.
- Howell, Edward I. H., Mech. Engr., 312 Bullitt Bldg.
- Jackson, Arthur C., Genl. Supt., Secy. and Treas., Miller Lock Co., 4533 Tacony St., Frankford.
- Jones, William R., Engr. of Constr., Univ. of Pa., 3401 Spruce St.
- Keely, Royal R., Cons. Management Engr., 1702 Mt. Vernon St.; also, Walpole, Mass.
- Keller, W. H. (Junior), Genl. Supt., Keller Mfg. Co., 21st St. and Allegheny Ave.
- Kenney, Lewis H., Draftsman-in-Charge, Mchy. Div., Navy Yard.
- Kerr, William C., Constr. Engr., Philadelphia Rapid Transit Co., Ninth and Dauphin Sts.
- Kinder, J. J. de, Mech. Engr., Atty-at-Law, Franklin Bank Bldg.
- King, Charles W. G., Supt., U. S. Metallic Packing Co.
- Klumpp, John Bartleman, Inspc. Engr., United Gas Improvement Co., Broad and Arch Sts.
- Kneass, Strickland L., Mgr. Injector Dept., Wm. Sellers & Co., 1600 Hamilton St.
- Ladd, Jas. B., Cons. Engr., Mut. Life Bldg., 1011 Chestnut St.
- Lafore, John Armand, 1211 Noble St.
- Lanza, Cav. Gaetano, Engr., Baldwin Loco. Wks., 500 N. Broad St., and Prof. Emeritus Theor. and Applied Mechanics, Mass. Inst. of Tech., Boston, Mass.
- Lauer, Conrad N., Genl. Mgr., Day & Zimmermann, Washington Bldg., 608 Chestnut St.
- Lawrence, Howard F. (Junior), Am. Engrg. Co.
- Ledoux, J. W., Ch. Engr., Am. Pipe & Constr. Co., 112 N. Broad St.
- Leland, Frederic H., Comptroller, Stand. Roller Bearing Co., 5001 Lancaster Ave.
- Lemoine, L. R., Pres., U. S. Cast Iron Pipe & Fdy. Co., 1421 Chestnut St.
- Lewis, Wilfred, Pres., Tabor Mfg. Co., 18th and Hamilton Sts.
- Linch, Edward P., 4000 Baltimore Ave.
- Lober, William D., Secy. and Treas., Vulcanite Portland Cement Co., 1230 Land Title Bldg.
- Longstreth, Charles, Pres., U. S. Metallic Packing Co., 427 N. 13th St.
- Loss, Henrik V., Cons. Engr., North Am. Bldg.
- Lovell, Alfred, Cons. Engr., 619 Harrison Bldg.
- Lowe, Wm. Vose, Engr. and Salesman, Hess-Bright Mfg. Co.; also, Fitchburg, Mass.
- McBride, Thomas C., Sales Mgr., Internatl. Steam Pump Co., North Am. Bldg.
- McMullin, Frank V., Treas., Pa. Forge Co.
- Machold, Charles E., Mech. Engr., Machold & Riddell, Stephen Girard Bldg.
- Marble, Ernest G., Genl. Sales and Wks. Mgr., Am. Engrg. Co.

PENNSYLVANIA, Philadelphia (Continued).

- Moore, Harold T., Industrial Engr., Day & Zimmermann, 608 Chestnut St.
- Morgan, Robert C., Engr., Stewart A. Jellett, Franklin Bank Bldg.
- Morris, Henry G., Commonwealth Bldg., 12th and Chestnut Sts., and Cons. Engr., Cresson Morris Co., 18th St. and Allegheny Ave.
- Mott, Abram Cox, Jr. (Junior), First V. P. and Genl. Mgr., Abram Cox Stove Co., American and Dauphin Sts.
- Mount, Carroll Hays (Junior), Salesman, Keystone Lubricating Co.; also, Columbus, O.
- Mowery, John N., Mech. Engr., Keystone Lubricating Co., 21st and Clearfield Sts.
- Muckle, John S., Mech. Engr., Franklin Bank Bldg.
- Muckle, M. R., Jr., Mech. Engr., 220 S. Broad St.
- Mudd, John Posey (Junior), Mech. Engr., Midvale Steel Co.
- Murphy, Edward Thomas (Junior), Sales Engr., Carrier Air Conditioning Co., 732 Real Estate Trust Bldg.
- Myers, Walter S., Ch. Draftsman, Ladd & Baker.
- Naageley, John C., Engr. and Arch., 73 Rochelle Ave., Wissaickon.
- Norris, Edward Wentworth (Junior), Draftsman, Southwark Fdy. & Mch. Co.
- Norris, Wm. H., Mech. Engr., Philadelphia Elec. Co., 1000 Chestnut St.
- OsBourn, Millard P. (Junior), Cons. Engr., 818 Pennsylvania Bldg.
- Owens, Robert B., Secy., The Franklin Inst.
- Painter, John G. (Junior), Peerless Motor Car Co., 247 N. Broad St.
- Parish, Wm. H. (Junior), Sales Engr., Westmoreland Coal Co., 224 S. 3d St.
- Parker, John Clinton, Genl. Mgr., Parker Boiler Co., Pa. Bldg.
- Patterson, Wistar E., Production Clerk, Elec. Storage Battery Co.
- Poultney, John Livingston, Ch. Engr., James Boyd & Bro., Inc., 25th and Wharton Sts.
- Price, William T. (Junior), Middle East Sales Engr., De La Vergne Mch. Co. of N. Y., 380 Bourse Bldg.
- Rae, John, Ch. Draftsman, Tabor Mfg. Co.
- Ramsden, John Thomas, Ch. Engr., The Tabor Mfg. Co., 18th and Hamilton Sts.
- Ray, Martin Hasset (Junior), Aide to Dir., Dept. of Public Safety, City Hall.
- Rice, Myron Wesley (Junior), Am. Engrg. Co., Cumberland St.; also, Worcester, Mass.
- Riddell, A. H., Machold & Riddell, 1020 Stephen Girard Bldg.
- Rippey, S. Howard, Cons. Engr., Stephen Girard Bldg.
- Roberts, Percival, Jr., 717 Arcade Bldg.
- Rusby, John M., Engr. of Tests, United Gas Improvement Co., Broad and Arch Sts.
- Sammis, Norman Lewis (Junior), Rep., Builders Iron Fdy.
- Sargent, Wm. Prescott, Pres., Mailing Device Co., Ltd., 1225 Spring Garden St.
- Satherberg, Carl Hugo, Ch. Engr., Midvale Steel Co., Nicetown.

PENNSYLVANIA, Philadelphia (Continued).

Schaum, Otto W., Pres., Schaum & Uhlinger, Inc., Mfrs. of Textile Mch., and Pres., Atlas Ball Co., Glenwood Ave. and 2d St.

Schoff, George C., Rep., Babcock & Wilcox Co., 1010 N. Am. Bldg.

Schreuder, Andrew M., Supt., Philadelphia Textile Mch. Co., Hancock and Somerset Sts.

Sellers, Coleman, Jr., Pres. and Engr., Wm. Sellers & Co., Inc., 1600 Hamilton St.

Shelmire, W. H., Jr., 69th and Launton Ave., Oak Lane.

Sibson, Horace E. (Junior), Mech. Engr., Harrison Safety Boiler Wks., 17th St. and Allegheny Ave.

Sinclair, George M., Cons. Engr., 618 Chestnut St.

Smith, Gilbert S., Elec. Contr., J. F. Buchanan & Co., 1719 Chestnut St.

Smith, T. Carpenter, Mech. Engr., 220 S. Broad St.

Spackman, Henry S., Pres., Henry S. Spackman Engrg. Co., 42 N. 16th St.

Spencer, William J. (Junior), Genl. Sales Mgr., Pure Water Apparatus Co., Abbott Bldg.

Stanford, J. Verne, Prof. Mech. Engrg., Univ. of Pa., Engrg. Bldg.

Stevenson, A. A., V. P., Stand. Steel Wks. Co., 1104 Morris Bldg.

Stirling, Allan, Drexel Bldg.

Strobel, Victor O., Genl. Mgr. Crane Dept., Niles-Bement-Pond Co., Mifflin and Meadow Sts.

Strouse, Sidney B. (Junior), Engr. and Member of Firm, Pa. Engrg. Co., 1119-1121 N. Howard St.

Tabor, Leroy, The Tabor Mfg. Co., 18th and Hamilton Sts.

Taylor, Frederick W., Cons. Engr., Highland Sta., Chestnut Hill.

Taylor, Harvey Birchard (Junior), Hyd. Engr., I. P. Morris Co., Beach and Ball Sts.

Thompson, S. K., Thompson Engrg. Co., 1011 Filbert St.

Thorne, Wm. H., Engr., Wm. Sellers & Co., 1600 Hamilton St.

Toner, Edward Joseph, Jr. (Junior), Mech. Draftsman, Link-Belt Co., Hunting Park Ave. and Reading R. R.

Townsend, David, Mech. and Cons. Engr., 1716 Spring Garden St.

de Trampe, J. Adam C. L., 1703 Spruce St.

Valentine, Louis Rossiter (Junior), Day & Zimmermann, 608 Chestnut St.

Van Duzee, Harold (Junior), Cons. Engr., 427 Walnut St.

Vauclain, Andrew C., Genl. Supt., Southwark Fdy. & Mch. Co., Washington Ave. and 5th St.

Vauclain, Samuel M., V. P., The Baldwin Loco. Wks., 500 N. Broad St.

Warren, Ambrose Gilmore, Mech. Engr., J. W. Paxson Co., 1607 Mt. Vernon St.

Warriner, Samuel D., Pres., The Lehigh Coal & Navigation Co., 437 Chestnut St.

Webster, William R., Cons. and Inspec. Engr., 411 Walnut St.

Wentworth, Reginald Andrew (Junior), Engr. with H. L. Gantt.

Wheeler, Clifton Harold, V. P. and Genl. Mgr., C. H. Wheeler Mfg. Co., Lehigh Ave. and 18th St.

PENNSYLVANIA, Philadelphia (Continued).

- Whitham, Jay M., Cons. Engr., 607 Bullitt Bldg.
 Wille, Henry Valentine, Asst. to Genl. Supt., Baldwin Loco. Wks., 500 N. Broad St.
 Williamson, Wm. C., Valley Rd. and 12th St., Oak Lane.
 Wilson, Percy Hartshorne, Secy., Asso. of Am. Portland Cement Mfrs., 1526 Land Title Bldg.
 Wisewell, Francis H., Jr. (Junior), Baldwin Loco. Wks.
 Wolf, Otto C., Engr., 511-512 Denckla Bldg.
 Wood, Albert Carroll, Cons. Mech. Engr., Pa. Bldg., 15th and Chestnut Sts.
 Wood, Edward R., Jr. (Junior), Sales Mgr., R. D. Wood & Co., 400 Chestnut St.
 Wood, Geo. R., Elec. and Mech. Engr., Berwind-White Coal Min. Co., 1120 Arcade Bldg.
 Wood, Walter, R. D. Wood & Co., 400 Chestnut St.
 Yarnall, D. Robert, Mech. Engr., Yarnall-Waring Co., and Genl. Mgr. and V. P., Nelson Valve Co., Chestnut Hill.
 Zimmermann, John Edward (Junior), Member of Firm, Day & Zimmermann, Engrs., Washington Bldg., 608 Chestnut St.
- Phoenixville.**—Moyer, Allen V. (Junior), Mech. Engr., Helme Safety Boiler Co.
- Pittsburgh.**—Albree, Chester B., Pres. and Ch. Engr., Chester B. Albree Iron Wks. Co., 1115 Metropolitan St., N. S.
 Amsler, Walter O. (Junior), Contr. Engr., Wabash Bldg.
 Angstrom, C. Jonas, 625 Clyde St.
 Ayers, Hobart B., Genl. Mgr., H. K. Porter Co.
 Baggaley, Ralph, Metallurgist and Miner, Pres., Pyritic Conversion Smelting Co., 1 Woodland Rd., E. E.
 Barbour, George Hurlbut, Asst. Ch. Mech. Engr., Carnegie Steel Co., Carnegie Bldg.
 Bennett, Chas. W., Asst. to Pres., Am. Sheet & Tin Plate Co., 1320 Frick Bldg.
 Bentley, Ernest W., Mgr. Pittsburgh Office, Skinner Eng. Co., 507 Diamond Bank Bldg.
 Bleyer, Chas. F. (Junior), Erecting Engr., Allis-Chalmers Co., 814 Frick Bldg.; also, Milwaukee, Wis.
 Bole, Wm. A., Asst. Genl. Mgr., Westinghouse Mch. Co.
 Bolling, Stewart, Jr. (Junior), Genl. Elec. Co., Oliver Bldg.
 Bowman, Franklin Meyer, V. P., Blaw Steel Constr. Co., Westinghouse Bldg.
 Boyd, William Charles, Asst. Engr., Pittsburgh Rys. Co., 435 Sixth Ave.
 Brashear, John A., Mfr., Astronomical and Physical Instruments, 1954-1964 Perrysville Ave., N. S.
 Brendlinger, Wm. B., Mgr., Ingersoll-Rand Co., 1226 Farmers' Bank Bldg.
 Brennan, James (Junior), Ch. Engr., Crucible Steel Co. of Am., 2014 Oliver Bldg.
 Breslove, Joseph (Junior), Engr., Geo. T. Ladd Co., Cons. Engrs., Farmers Bank Bldg.
 Brown, Charles M., Genl. Sales Agt., Colonial Steel Co., 1203 Keystone Bldg.
 Bryen, Thomas T. (Junior), Mech. Engr. Gas Eng. Dept., Mesta Mch. Co.
 Buffum, F. D., Contr. Engr., 6004 Jenkins Arcade.

PENNSYLVANIA, Pittsburgh (Continued).

- Carpenter, Henry Albert, V. P., Riter-Conley Mfg. Co., 56 Water St.
- Chandler, Sellers McKee (Junior), Pres., Chandler-Boyd Supply Co., Terminal Warehouses.
- Chester, John Needels, Chester & Fleming, Cons. Engrs., Union Bank Bldg.
- Clapp, Geo. H., cor. 7th and Bedford Aves.
- Coffin, Wm. Carey, Struc. Engr., Jones & Laughlin Steel Co.
- Connelley, Clifford B., Dean Sch. of Applied Industries, Carnegie Inst. of Tech., Schenley Park.
- Cook, Thomas R., Asst. Engr. M. P., Office Genl. Supt. M. P., Pa. Lines West.
- Cornelius, Henry Robert, Sales Engr., Mesta Mch. Co.
- Crane, Frederick Lea (Junior), Engrg. Dept., West Penn Traction & Water Power Co., Bank for Savings Bldg.
- Crawford, David Francis, Genl. Supt. M. P., Pa. Lines, Union Sta.
- Dinkey, A. C., Pres., Carnegie Steel Co., Carnegie Bldg.
- Dreyfus, Edwin D., West Penn Traction & Water Power Co., 31 Fidelity Title & Trust Co. Bldg.
- Ely, Sumner Boyer, V. P., Chester B. Albree Iron Wks. Co.
- Ellis, Frank I., Ch. Engr., United Engrg. & Fdy. Co., 2312 Farmers' Bank Bldg.
- Fickes, Edwin S., Engr. and Pur. Agt., Aluminum Co. of Am.
- Fitzgerald, Charles, Mgr. Sales and Asst. Genl. Mgr., Pittsburgh Valve Fdy. & Constr. Co.
- Flagg, Samuel B. (Junior), Engr., U. S. Bureau of Mines, 40th and Butler Sts.
- Flickinger, Harrison William (Junior), Estimator, Thompson-Starrett Co., 2d Natl. Bank Bldg.
- Fox, John Herbert, Ch. Engr., Pittsburgh Plate Glass Co., Frick Bldg.
- Gardner, Kirtland C., Sales Engr., 2311 Farmers Bank Bldg.
- Graves, James Madison, Supt. Power Stas., Allegheny Co. Light Co., 435 Sixth Ave.
- Greth, J. C. Wm., Mgr. Water Purifying Dept., Wm. B. Scaife & Sons Co.
- Grimshaw, Frederick G. (Junior), Asst. Engr. M. P., Pa. R. R.
- Guy, Albert Emile, Ch. Engr., Wilson-Snyder Centrifugal Pump Co.
- Herbert, Jack Stanley, V. P. and Ch. Engr., Penn Motor Car Co.
- Hiles, Elmer K., 2511 Oliver Bldg.
- Hobbs, James Clarence (Junior), Steam Engr., The Allegheny Co. Light Co.
- Hodges, Chas. Bowen (Junior), H. K. Porter & Co.'s Shop.
- Hood, Ozni Porter, Ch. Mech. Engr., U. S. Bureau of Mines, 40th and Butler Sts.
- Howarth, H. A. Stevens, Asst. Prof. Mch. Design, Carnegie Inst. of Tech.
- Hunter, John A., Steam Engr., Am. Sheet & Tin Plate Co., Frick Bldg.
- Kaufman, Emanuel, Metallurgist on Steel, 1123 Park Bldg.
- Kennedy, Julian, Cons. Mech. Engr., 1217 Bessemer Bldg.
- Kingsbury, Albert, Cons. Engr., 219 Stratford Ave.

PENNSYLVANIA, Pittsburgh (Continued).

- Knisely, Edw. S., West. Sales Rep., Bethlehem Co., 1406 First Natl. Bank Bldg.
- Knowles, Morris, Cons. Engr., 2548 Oliver Bldg., and Dir. Dept. of Sanitary Engrg., Univ. of Pittsburgh.
- Kohler, David S., Genl. Supt., Oliver Iron & Steel Co.
- Ladd, George Tallman, Pres., The George T. Ladd Co., 1620 Farmers' Bank Bldg.
- Laughlin, Alex., Jr. (Junior), Engr., Alex. Laughlin & Co., Lewis Bldg.
- Lester, Bernard, Sales Engr., Westinghouse Elec. & Mfg. Co.
- Lincoln, Paul Martyn, Genl. Engr., Westinghouse Elec. & Mfg. Co., P. O. Box 911.
- McCarty, Frank James (Junior), Designing Engr., Tate, Jones & Co., Inc., 1007 Empire Bldg.
- McClelland, E. S., Engr. Gas and Steam Eng., The Westinghouse Mch. Co.
- McKean, Robert Andrews, Supt. Keystone Wks., Jones & Laughlin Steel Co., 3140 Second Ave.
- McNeil, Merritt Charles, Salesman, The Westinghouse Mch. Co.
- Macintire, Horace Jas. (Junior), Instr. Mech. Engrg., Carnegie Inst. of Tech.
- Martin, Frederick Sheldon, Supt. Industrial Motor Dept., Westinghouse Elec. & Mfg. Co.
- Maxfield, Howard H., M. M., Pa. R. R. Co., 28th St.
- Mesta, George, Pres., Mesta Mch. Co., Oliver Bldg.
- Moore, Lee C., Cons. Mech. Engr., Lee C. Moore & Co., 341 Sixth Ave.
- Moore, Wm. Enoch, Mgr., West Pa. Ry. & Ltg. Properties, and Cons. Engr., Am. Water Wks. & Guarantee Co., 603 Bank for Savings Bldg.
- Morse, William Horace, Asst. V. P., A. Garrison Fdy. Co.
- Murray, J. Weidman, Sales Mgr., Allis-Chalmers Co., 814 Frick Bldg.
- Newman, Martin Freeze, Asst. Mgr. Water Purifying Dept., Wm. B. Scaife & Sons Co., 221 First Ave.
- Nibecker, Karl (Junior), Pittsburgh Rep., Southwark Fdy. & Mch. Co., 804 Frick Bldg.
- Patterson, Peter C. (Junior), Ch. Engr., Natl. Tube Co., 554 Frick Annex.
- Pinkerton, Andrew, Elec. Engr., Am. Sheet & Tin Plate Co.
- Porterfield, Henry A., 600 Lewis Bldg.
- Quigley, Jas. Edwin (Junior), Mgr. Insulation Dept., Armstrong Cork Co., 23d and River.
- Rea, James Childs (Junior), Supt. Rivet, Track, Bolt and Galvanizing Depts., Oliver Iron & Steel Co., S. 10th St.
- Ruud, Edwin, Pres., Ruud Mfg. Co., 29th and Smallman Sts.
- Schaaake, William (Junior), Engr. Ry. Engrg. Dept., Westinghouse Elec. & Mfg. Co.
- Sewell, J. G. Clifton (Junior), United Engrg. & Fdy. Co., Farmers' Bank Bldg.
- Shipley, Grant B., Pres. and Genl. Mgr., Pittsburgh Wood Preserving Co.
- Smith, Cameron C., Pres. and Genl. Mgr., Union Steel Castings Co.

PENNSYLVANIA, Pittsburgh (Continued).

- Smith, Carl D. (Junior), Engr., U. S. Bureau of Mines, 40th and Butler Sts.
- Smith, William, M. M. Eliza Furnaces, Jones & Laughlin Steel Co.
- Snyder, William E., Mech. Engr., Am. Steel & Wire Co., Frick Bldg.
- Stafford, Benjamin E. D. (Junior), Genl. Mgr., Flannery Bolt Co., Vanadium Bldg.
- Stewart, Reid T., Prof. Mech. Engrg., Univ. of Pittsburgh.
- Straub, Albert A. (Junior), Asst. Ch. Engr. of Power Stas., Pittsburgh Rys. Co.
- Strom, Carl A., Mgr., Am. Loco. Co.
- Stucki, Arnold, Engr., Oliver Bldg.
- Svenson, John A. F., Mech. Engr., Oliver Bldg.
- Taber, George H., Genl. Mgr., Gulf Refining Co., Frick Bldg. Annex.
- Tate, John M., Jr., Pres., Tate, Jones & Co., Inc., 1007 Empire Bldg.
- Terry, Charles D., Asst. to Genl. Supt., Natl. Tube Co., 1706 Frick Bldg.
- Thurman, Charles Ross, Ch. Engr., Elec. Renovator Mfg. Co.
- Todd, James, Pres. and Ch. Engr., The Sterling Varnish Co.
- Town, Frederic E., Local Mgr., Otis Elev. Co., Keenan Bldg.
- Trinks, W., Prof. Mech. Engrg., Carnegie Inst. of Tech.
- Wadsworth, Frank L. O., Cons. Engr. and Pres., Miller Non-Corrosive Metal Co., 1347-1348 Oliver Bldg., 1801-1802 Commonwealth Blvd.
- Waters, William L., Designing Engr., Westinghouse Elec. & Mfg. Co.
- Westinghouse, George.
- Williams, D. Curtis, Mech. Engr., 664 Maryland Ave.
- Wilson, Henry D., V. P., Wilson Snyder Mfg. Co., 2 Ross St.
- Wilson, Nelson C., 209 Ninth St.
- Woodman, Forrest E. (Junior), Asst. Engr., U. S. Bureau of Mines, 40th and Butler Sts.
- Wurts, Edward Vanuxem, Mech. Engr., United Engrg. & Fdy. Co.
- Wyckoff, Arealous W. (Junior), Pres., A. W. Wyckoff Co., 2218 Farmers' Bank Bldg.
- Port Carbon.**—Allison, Robert, Mech. Engr., Ret.
- Pottstown.**—Jones, David Todd, Genl. Mgr. and Treas., Wilbraham Green Blower Co.
- Nichols, John T. (Junior), Ch. Engr., Chadwick Engrg. Wks.
- Pottsville.**—Hagerty, Walter W. (Junior), Y. M. C. A.; also, Brooklyn, N. Y.
- Lesser, W. H. (Junior), Mech. Engr., Philadelphia & Reading Coal & Iron Co.
- Rankin.**—Broden, Edwin H., Asst. Supt. Rankin Wks., Am. Steel & Wire Co.
- Reading.**—Bell, Joseph M., Mech. Engr., Reading Iron Co.
- Heizmann, Louis J. (Junior), V. P., Penn Hardware Co.
- Schuhmann, George, V. P. and Genl. Mgr., Reading Iron Co.
- Ridgeway.**—Norton, Homer Burdett, Ch. Engr., Elk Tanning Co.
- Rook.**—Du Barry, Ed. G. (Junior), Draftsman, Wabash Pittsburgh Terminal Ry. Co.

PENNSYLVANIA (Continued).

- Scottdale.**—Robinson, James R., Mgr., Scottdale Fdy. & Mch. Co.
- Scranton.**—Clemens, A. B., Prin., Sch. Mech. Engrg., Internatl. Corr. Schs.
 Foster, Rufus J., V. P., Mgr. Mines and Minerals, Internatl. Text Book Co., Wyoming Ave.
 Fuller, Ray W., Elec. Engr., 1530 Wyoming Ave.
 Harris, John J., Mech. Engr., Bd. of Ed., Administration Bldg., Washington Ave.
 Holloway, Thurman Welford (Junior), Asst. Prin., Sch. Mech. Engrg., Internatl. Corr. Schs.
 Mattes, Wm. F., Ret., 1529 Sanderson Ave.
 Webber, Henry, Mech. Engr., Finch Mfg. Co.
- Shamokin.**—Mullen, John, Pres., Shamokin Iron Wks., 516 N. Franklin St.
- Sharon.**—Kranz, William G., Mgr., Sharon, Pa., and Melrose Park, Ill., Wks., Natl. Malleable Castings Co.
 Morrison, Egbert R. (Junior), Asst. Mgr., Sharon Boiler Wks., Genl. Sales Agt., Morrison Water Tube Boilers.
 Warren, George Sessions, Ch. Engr., Sharon Steel Hoop Co.
- Shawnee-on-Delaware.**—Worthington, Charles C., Manwalamink.
- South Bethlehem.**—Blakeley, George Henry, Struc. Engr., Bethlehem Steel Co.
 Brown, Walter S., Engr. Power Dept., Bethlehem Steel Co.
 Caum, Samuel L. (Junior), Mech. Engr., South Bethlehem Natl. Bank Bldg.
 Colby, Albert Ladd, Cons. Engr., and Iron, Steel and Fuel Metallurgist, 447 Lehigh St.; also, New York, N. Y.
 de Schweinitz, P. B., Prof. Mch. Design, Lehigh Univ.
 Johnston, Archibald, V. P., Bethlehem Steel Co.
 Klein, Arthur W., Assoc. Prof. Mech. Engrg., Williams Hall, Lehigh Univ.
 Klein, Joseph F., Dean of Faculty and Prof. Mech. Engrg., Williams Hall, Lehigh Univ.
 Leibert, John, Supt. of Forge, Bethlehem Steel Co.
 McCann, Warren Edward (Junior), Asst. to Supt. of Foundries, Bethlehem Steel Co.; also, Philadelphia.
 Maguire, Michael Terrence, Supt. of Power, Bethlehem Steel Co.
 Seem, Charles B. (Junior), Designing Draftsman, Eng. Dept., Bethlehem Steel Co.
 Stout, R. Paul, Engr. of Ordnance, Bethlehem Steel Co.
 von Philp, C., Mgr. Mchy. Dept., Bethlehem Steel Co.
 West, Arthur, Mgr. Power Dept., Bethlehem Steel Co.
- State College.**—Diemer, Hugo, Prof. Industrial Engrg., Pa. State College, and Cons. Industrial Engr.
 Jackson, John Price, Dean Sch. of Engrg., Pa. State College, and Cons. Engr.
 Moyer, James A., Prof. in Charge Dept. Mech. Engrg., The Pa. State College, and Pennsylvania Bldg., Philadelphia.
 Wood, Arthur J., Assoc. Prof. Railroad Mech. Engrg., Pa. State College.
- Steelton.**—Pleasanton, F. Rodney (Junior), Pa. Steel Co.
 Turner, Charles Prentice, Ch. Engr., Pa. Steel Co.
 Varnes, Samuel K. (Junior), Exper. Engr., Pa. Steel Co.
- Stowe.**—Tarbox, George Roger, Engr., Stanley G. Flag & Co.

PENNSYLVANIA (Continued).

Swarthmore, Del. Co.—Beardsley, Arthur, Emeritus Prof. Engrg., Swarthmore College.

Swissvale.—Corey, Fred Brainard, Engr. of Inspec. and Tests, Union Switch & Signal Co.

Uniontown.—Willard Lewis Leigh, Asst. Genl. Mgr., W. J. Rainey Coke Co.

Vandergrift.—Anderson, Howard L. (Junior), M. M. Vandergrift Wks., Am. Sheet & Tin Plate Co.

Bodwell, Howard L., Asst. Dist. Mgr., Am. Sheet & Tin Plate Co.

Washington.—Lambie, James M. (Junior), Asst. Genl. Mgr., Findlay Clay Pot Co.

Waynesboro.—Frick, Abraham O., Pres., The Frick Co.

Wilkes-Barre.—Bevin, Sydney (Junior), Matheson Auto. Co.

Bunting, Douglas, Ch. Engr., Lehigh & Wilkes-Barre Coal Co.

Coward, Herbert (Junior), Coward & Long, People's Bank Bldg.

Dean, Arthur M. (Junior), Mech. Engr., Matheson Auto. Co.

Koplin, Robert Deemer (Junior), Mech. Dept., Lehigh Valley Coal Co., 208 Coal Exch.

Nicholson, Saml. T., Pres. and Genl. Mgr., Vulcan Iron Wks.

Norris, Robert V., Cons. Engr., 524 Second Natl. Bank Bldg.

Wilkesburg.—Blaisdell, Allen Holt (Junior), 736 Wallace Ave.

Honywill, Albert William, Jr. (Junior), 522 Holmes St.

Williamson School P. O., Del. Co.—Pratt, James Alfred, Dir., Williamson Free Sch. of Mech. Trades.

Williamsport.—Baquet, Camille, Jr., Supt., Valley Iron Wks., Box 34.

Shepherd, Wm. G., Genl. Mgr., Shepherd Engrg. Co.

Woodlawn.—Cronemeyer, Henry C., Efficiency Engr., Jones & Laughlin Steel Co.

Gressly, Oscar Emil, Ch. Engr. Aliquippa Wks., Jones & Laughlin Steel Co.

York.—Campbell, Gordon (Junior), Pres. and Genl. Mgr., York Rys. Co., 27 W. Market St.

Farquhar, Francis, Genl. Mgr., A. B. Farquhar Co., Ltd.

Felthousen, John H., Hyd. and Mech. Engr., S. Morgan Smith Co.

Shipley, Thos., Genl. Mgr., York Mfg. Co.

PHILIPPINE ISLANDS

Manila.—Blaisdell, Benjamin H., Ch. Engr., Manila Elec. R. R. & Light Co.

Strong, Frank L., Dealer in Am. Mchy. and Supplies, 105 Escolta.

PORTO RICO

Arecibo.—Burlingame, Wm. B., Arecibo Ice & Soda Water Co., Inc.; also, Exeter, N. H.

Fajardo.—Scherr, Frederick, Jr., Asst. Engr., Fajardo Sugar Co.

Manati.—Saldana, Eduardo E., Mech. Engr. and Ch. Engr., Central "Monserrate;" also, San Juan.

Ponce.—Junghans, Edward K., Ch. Engr., Central Mercedita.

San Juan.—Teele, Fred W., Genl. Mgr., Porto Rico Rys. Co., Ltd.

RHODE ISLAND

- Bristol.**—Herreshoff, John B., Pres. and Treas., Herreshoff Mfg. Co.
- East Providence.**—Healy, Frederick E., Cons. Engr., 162 Central Ave.
- Pawtucket.**—Bixby, William P. (Junior), Union Wadding Co.
 Bullock, Edwin R., Mech. Engr., 38 Brook St.
 Carpenter, James M., Pres., Treas. and Genl. Mgr., J. M. Carpenter Tap & Die Co.
 Davis, George H. (Junior), Secy., J. J. Kenyon Mfg. Co.
 Seabury, Dwight, Arch. and Engr., 12 East Ave.
 Sellw, Ernest B., Pres. and Mgr., Sellw Mch. Tool Co.
 Westcott, Valorus Stukely, Mech. Supt., J. & P. Coats, Ltd.
- Phenix.**—Hoxie, Frederick J.
- Providence.**—Aldrich, John Gladding, V. P. and Genl. Mgr., N. E. Butt Co.
 Almy, Darwin, Pres., Almy Water Tube Boiler Co., 178-184 Allen Ave.
 Annan, Arthur H., Supt., R. I. Tool Co.
 Bartlett, Dwight Kellogg, Genl. Mgr. and Asst. Treas., Builders Iron Fdy., 9 Codding St.
 Beaman, Elmer A., Beaman & Smith Co., Gordon and Reynolds Ave.
 Bliss, Edwin C., Pres., E. C. Bliss Mfg. Co., and V. P., A. H. Bliss Co.
 Blood, Louis Henry, Designer, Brown & Sharpe Mfg. Co.
 Brooks, J. Ansel, Assoc. Prof. Mechanics and Mech. Drawing, Brown Univ.
 Brown, Ernest Wayne, V. P. and Engr., Blackstone and Merchants Mutual Fire Ins. Cos., 802 Grosvenor Bldg.
 Burlingame, Luther D., Ch. Draftsman, Brown & Sharpe Mfg. Co.
 Buttolph, Benjamin Gilbert, V. P. and Engr., Mfrs. Mut. Fire Ins. Co., 815 Banigan Bldg.
 Chase, Frederic A., F. A. Chase & Co.
 Connet, Frederick N., Sales Mgr. Venturi Meter Dept., Builders Iron Fdy.
 Cranston, Raymond Earl (Junior), Asst. Engr. to John R. Freeman, 815 Grosvenor Bldg.
 Dart, William Crary, Pres., R. I. Tool Co.
 Davis, Charles Ethan, Genl. Mgr., Am. Locomotive Co.
 Dickerman, Albert Cornell, Mech. Engr., R. I. Supply & Eng. Co., 166 W. Exchange St.; also, Dorchester, Mass.
 Dow, Charles E. W., Sales Agt., Tillotson Humidifier Co., 78 Fountain St.
 Du Villard, Henry A., Mech. Engr., 173 George St., East Side Sta.
 Estes, William Wood, Designer, Genl. Fire Extinguisher Co.
 Fenner, Herbert N., Pres.; N. E. Butt Co.
 Freeman, John R., Pres., Mfrs. Mut. Fire Ins. Co., 815 Grosvenor Bldg.; also, Cons. Engr., N. Y. Bd. of Water Supply, 165 Broadway, New York, N. Y.
 Giles, C. E., Agt., Am. & British Mfg. Co.
 Hall, James Alexander (Junior), Instr. Mech. Engrg., Brown Univ.
 Jenks, Richard P., Mech. Engr., 735 Banigan Bldg.

RHODE ISLAND, Providence (Continued).

- Kenerson, Wm. Herbert, Prof. Mech. Engrg., Brown Univ.
 Kennedy, William A. (Junior), Testing Engr., Genl. Fire Extinguisher Co.
 Loepsinger, Albert John (Junior), Mech. Engr., Genl. Fire Extinguisher Co.
 McGregor, Hugh R., Mech. Supt., Brown & Sharpe Mfg. Co.
 McIntosh, Samuel Fraser, Constr. Engr., 534 Industrial Trust Bldg.
 McSoley, Frank Bartlett (Junior), Service Dept., Narragansett Elec. Ltg. Co.
 MacLeod, Frank Norman, Sales Engr., Brown & Sharpe Mfg. Co.
 Merritt, Arthur A., Mech. Engr., Brown & Sharpe Mfg. Co.; also, Worcester, Mass.
 Murphy, William T. (Junior), Genl. Mgr., Stand. Mchy. Co., 7 Beverly St.
 Nehrbas, Frederick Phillip, Factory Mgr., Am. Loco. Co.
 Newton, George Henry, Asst. to Mech. Supt., Brown & Sharpe Mfg. Co.
 Ode, Randolph Theodore, Secy., Providence Lithograph Co., 353 Prairie Ave.
 Parker, John, Mch. Designer, Brown & Sharpe Mfg. Co.
 Phetteplace, Thurston M., Asst. Prof. Mech. Engrg., Brown Univ.
 Pingree, Edwin Daniel, V. P. and Engr., Mfrs. Mut. Fire Ins. Co., 815 Grosvenor Bldg.
 Pitman, Stephen Minot, Secy., Narragansett Mut. Fire Ins. Co., P. O. Box 1422.
 Richardson, Charles Germane, Sales Engr. Meter Dept., Builders Iron Fdy.
 Richmond, Harold A. (Junior), Pres., Am. Emery Wheel Wks., 325 Waterman St.
 Richmond, Knight C., Cons. Engr., 526 Banigan Bldg.
 Roberts, Montague H. (Junior), Ch. Engr., Am. Loco. Co.
 Robertson, R. A., Treas., Providence Engrg. Wks.
 Sargent, John W., Providence Engrg. Wks., 521 S. Main St.
 Sharpe, Henry D., Treas., Brown & Sharpe Mfg. Co.
 Sharpe, Lucian, with Brown & Sharpe Mfg. Co., 130 Angell St.
 Sheldon, F. P., Steam, Hyd., Elec. and Mill Engr., Industrial Trust Bldg.
 Shipley, Albert Robosson, Efficiency Engr., N. E. Butt Co.
 Smith, George H., Beaman & Smith Co., Gordon and Reynolds Aves.
 Viall, William A., Secy., Browne & Sharpe Mfg. Co.
 Walker, Frank A. (Junior), Engr., B. B. & R. Knight, 314 Dyer St.
 Walker, Sidney G., Engr., Mfrs. Mut. Fire Ins. Co., 815 Banigan Bldg.
 Whitehead, George E., Mech. Engr., 621 Broadway.
Saylesville.—Fisher, Howard Colburn (Junior), Ch. Engr., Sayles Bleacheries.
 Gates, Thayer P. (Junior), Sayles Bleacheries.
 Hubbard, Carleton Waterbury (Junior), Constr. Engr., Sayles Bleacheries.

RHODE ISLAND, Saylesville (Continued).

- Nickerson, John Winslow (Junior), Industrial Engr., Glenlyon Dye Wks.
 Reno, Harold P. (Junior), Sayles Bleacheries.
 Wood, Kenneth F., Supt., Sayles Bleacheries.
Warren.—Wightman, D. A., Cons. Engr.
Westerly.—Dock, Herman, Mech. Engr., U. S. Motor Co.

SOUTH CAROLINA

- Charleston.**—Barkley, Matthew B. (Junior), V. P., Cameron & Barkley Co., Genl. Asbestos & Rubber Co., 160 Meeting St.
Clemson College.—Earle, Samuel Broadus, Dir. Engrg. Dept., Prof. Mech. and Elec. Engrg., Clemson College.
Conway.—Hallock, Homan Fitzgreene (Junior), Engr. So. Wood Products Co.
Spartanburg.—Kreisinger, Henry, Fuel Engr., Clinchfield Fuel Co.
 Ray, Walter Thornton, in Charge Engrg. Dept., Clinchfield Fuel Co.
Ware Shoals.—Bannon, Leo Matthew (Junior), Ch. Engr. and Electrician, Ware Shoals Mfg. Co.

SOUTH DAKOTA

- Vermillion.**—Davidson, Morgan W., Prof. Mech. Engrg., Univ. of S. D.

TENNESSEE

- Chattanooga.**—Catlin, Abel Delancy, V. P. and Wks. Mgr., The Wheland Co.
 Catlin, William Lyle (Junior), Supt., The Wheland Co.
 Rigdon, Carl (Junior), Supt. Light and Power, Chattanooga Ry. & Light Co., 710 Market St.
 Sanders, Newell, Prop., Newell Sanders Plow Co.
Copperhill.—Case, Albert H. (Junior), Mgr., Tenn. Copper Co.
Knoxville.—Ferris, Charles Edward, Prof. Mech. Engrg., Univ. of Tenn.
 Jones, Forrest R., 1702 Melrose Pl.
 Switzer, John Albert, Prof. Hyd. Engrg., Univ. of Tenn., and Hyd. Engr., Tenn. State Geological Survey.
Memphis.—Gladfelter, Herbert S. (Junior), Inspr., U. S. Engr.'s Office.
 York, Robert, V. P. and Treas., York Lumber & Mfg. Co., and V. P., Grant Lumber Co.
Nashville.—Allen, W. Harwell (Junior), Allen-Scales Engrg. Co., 930 Stahlman Bldg.
 Brown, Chas. S., Prof. Mech. Engrg. and Cons. Engr., Vanderbilt Univ.
 Brown, Hugh T., Engr., Genl. Elec. Co., 932 Stahlman Bldg.
 Collier, Wm. H., Genl. Mgr., Marathon Motor Wks.
 Rooney, Martin Aloysius (Junior), Engr., Marathon Motor Wks., Clinton St. and 12th Ave., N.

TEXAS

- Austin.**—Coffin, Trenmor (Junior), Instr. Elec. Engrg., in Charge of Shop Wk., Univ. of Tex.
Canutillo.—Whittier, Chas. Robert.

TEXAS (Continued).**Cement.**—Stancliff, Arthur D. (Junior).**College Station.**—Fermier, Emile J., Prof. Mech. Engrg., Agri. and Mech. College of Tex.

Smith, Harry E., Assoc. Prof. Mech. Engrg., Agri. and Mech. College of Tex.

Dallas.—Cox, Frank G., Local Mgr., Otis Elev. Co.

Elrod, H. E., 905 Southwestern Life Bldg.

Jalonnick, Hartwell (Junior), Tex. Power & Light Co., 1320 Commerce St.

Scott, Dr. Arthur Curtis, Pres., Scott Cons. Engrg. Co., 632 Wilson Bldg.

Shaw, Joseph D., Engr. and Contr., The Fountain-Shaw Engrg. Co., Southwestern Life Bldg.

Slater, F. R. (Junior), Genl. Supt., Tex. Power & Light Co., 1320 Commerce St.

Fort Worth.—Bertsch, John Charles, Refrigerating Engr., P. O. Box 417.

Chester, C. P., Asst. Supt., Stone & Webster Engrg. Corp., 606 Flatiron Bldg.

Galveston.—Lawrence, Samuel Eugene (Junior), Junior Mech. Engr., U. S. Engrs. Dept., care U. S. Engrg. Office; also, Ft. Smith, Ark.

McGlone, Roy G. (Junior), U. S. Junior Mech. Engr., U. S. Engr. Dept., Trust Co. Bldg.

Houston.—Barrows, Lee Earle, Asst. Cons. Engr., The Texas Co.; also, Olean, N. Y.

Crawford, Charles C., Jr. (Junior), Mgr. Houston Office, A. M. Lockett & Co., Ltd., Brazos Hotel Bldg.

Hartwell, Arthur Edward (Junior), Dir. Mech. Engr. and Asst. Mgr., Hartwell Iron Wks.

Haskell, George O. (Junior), V. P., Fidelity Cotton Oil & Fertilizer Co.

Hildenbrand, Harry (Junior), Genl. Supt., The L. C. Ehle Oil Mills, P. O. Box 278.

Knoop, Theo. M. (Junior), Salesman, A. M. Lockett & Co., Ltd., Brazos Hotel Bldg., 617 Washington Ave.

Scott, Clarence N., Cons. Engr., 1102 Carter Bldg.

San Antonio.—Jones, Reid (Junior), Ch. Engr. and Asst. Secy., San Antonio Water Supply Co.; also, St. Louis, Mo.

Tuttle, William B., V. P. and Genl. Mgr., San Antonio Gas & Elec. Co.; and V. P. and Genl. Mgr., San Antonio Traction Co., 305 Houston St.

Texas City.—Chapman, Harry Burdett, Long & Chapman.**UTAH****Midvale.**—Anderson, Leslie Douglass, Supt., U. S. Smelting Co.**Provo.**—McAllister, Daniel Handley, Constr. Supt., Utah Power & Light Co., 1015 New House Bldg.

Nunn, P. N.

Salt Lake City.—Beckstrand, Elias H., Prof. Mech. Engrg., Univ. of Utah.

Cheever, Markham, The Telluride Power Co.

Davoud, Vahram Y., Elec. and Mech. Engr., Utah Power & Light Co.

Jennens, Arthur E. (Junior), Box 1362.

UTAH, Salt Lake City (Continued).

Wraith, William, Internatl. Smelting & Refining Co., Kearns Bldg.

Tooele.—Sicka, Louis Theodore, Mech. Supt., Tooele Plant, Internatl. Smelting & Refining Co.

VERMONT

Bennington.—Beach, Charles S. (Junior), Designer and Machinist, 745 Main St.

Scott, Olin, Prop., Bennington Mch. Wks.

Burlington.—Robinson, Edward, Prof. Mech. Engrg., Univ. of Vt.

Proctor.—Proctor, Redfield, Asst. Genl. Supt., Vt. Marble Co.

Rutland.—Steward, George Henry, Charge of Designing and Supt. Constr. of Mchs., L. & J. A. Steward.

White, Edward F., Cons. Engr., Sulphur Plants, and Sand Lime Brick Plants, Pres., Rutland Mfg. Co.

St. Johnsbury.—Bousfield, Alfred, Ch. Engr., E. & T. Fairbanks Co.

Sheldon Springs.—Raymond, Herbert Emmons (Junior), Mech. Engr.

South Shaftsbury.—Cole, L. W., Mech. Supt., Eagle Sq. Mfg. Co.

Springfield.—Bryant, William L., Mgr., Bryant Chucking Grinder Co.

Fellows, Edwin R., Mgr., The Fellows Gear Shaper Co.

Flanders, Ralph E., Mgr. of Fay Lathe, Jones & Lamson Mch. Co.

Hartness, James, Pres., Jones & Lamson Mch. Co.

Perry, George Arthur, Mech. Engr., Jones & Lamson Mch. Co.

Slomer, Wm. Frederick, Engr. Rep., The Fellows Gear Shaper Co.; also, Detroit, Mich.

Woolson, Wm. D., Treas., Jones & Lamson Mch. Co.

Windsor.—Gridley, George O., V. P. and Genl. Mgr., Windsor Mch. Co.

VIRGINIA

Blacksburg.—Johnson, John S. A., Prof. Exper. Engrg., Va. Poly. Inst.

Randolph, L. S., Cons. Engr.

Charlottesville.—Thornton, Wm. Mynn, Prof. Applied Mathematics and Dean Dept. of Engrg., Univ. of Va.

Covington.—Sangster, William, Supt., Covington Mch. Co.

Fontella.—von Ammon, Siegfried.

Fort Monroe.—Buyers, Archie Stanton (Junior), Second Lieut., Coast Artillery Corps, U. S. A.; also, Sterling, Ill.

Jenks, Glen F. (Junior).

Lynchburg.—Wiley, Edgar C., Cons. Engr., 914 Main St.

Newport News.—Dillard, Capt. James B., Inspr. of Ordnance, U. S. A., care of Newport News Shipbuilding & Dry Dock Co.

Gray, John Wilson (Junior), Supt. of Mchy., Newport News Shipbuilding & Dry Dock Co.

Ross, Taylor W. (Junior), Supt. Repairs and Docks, Newport News Shipbuilding & Dry Dock Co.

Norfolk.—Adams, Julius Leroy, Genl. Supt. Rys. and Ferries, Norfolk & Portsmouth Traction Co.

VIRGINIA, Norfolk (Continued).

- Breese, Charles P., Second V. P., J. R. Young Fertilizer Co., Inc., 200 Citizens Bank Bldg.
- Quinn, Charles Henry, Asst. Engr. M. P., Norfolk & West. Ry.
- Stanbrough, Duncan G., Asst. Shop Supt., U. S. Navy Yard.
- Wilson, Lester G., 339 Mowbray Arch; also, Secy. and Engr., Jas. G. Wilson Mfg. Co., New York, N. Y.
- Richmond.**—Archer, Edward R., Ch. Engr., Tredegar Co.
- Bocorselski, F. E., Asst. Mech. Supt., Am. Loco. Co.
- Cameron, Barton H., Pres., Cameron Stove Co., Box 635.
- Elder, Hugh M., Genl. Power Engr., Am. Loco. Co. of N. Y.
- Johnston, James Ambler (Junior), Cons. Engr., Natl. Bank of Va. Bldg.
- Lichtenstein, Valentine (Junior), Supt., The Fish Net & Twine Co.
- Morris, Wm. S., Spec. Agt., C. & O. R. R.; also, Fort Wayne, Ind.
- Roelker, Carl J., Cons. Engr., Roelker & Lee, State Bank Bldg.
- Scarborough, Francis Winthrop, Secy., Treas. and Genl. Mgr., Scarborough & Howell, 723 E. Main St.
- Scrivenor, Arthur, Cons. and Contr. Engr., Mut. Bldg.
- Whitehurst, Herbert C. (Junior), Mgr., Evans, Almirall & Co., 10th and Byrd Sts.
- Willis, Edward J., Richmond Elec. Co., P. O. Box 416.
- Roanoke.**—Kearney, Alex, Asst. Supt. M. P., Norfolk & West. Ry.
- Pilcher, John A., Mech. Engr., Norfolk & West. Ry. Co.
- Wallis, Philip, Hotel Roanoke.
- Saltville.**—Crute, William Rowzie (Junior), Asst. M. M., Mathieson Alkali Wks.
- McCrary, John Adger, Draftsman and Asst. to Genl. Supt., The Mathieson Alkali Wks.
- Mount, Wm. Dye, Genl. Supt., Mathieson Alkali Wks.
- Williamsburg.**—Bechtel, John Adams.

WASHINGTON

- Pullman.**—Martin, Mack, Dept. Mech. Engrg., Wash. State College.
- Seattle.**—Allen, William Duncan, Cons. Engr., Htg. and Vent., 605 Peoples Savings Bank Bldg.
- Bailey, T. S., Pacific Coast Mgr., Elec. Boat Co.
- Beck, Rudolph H. (Junior), Sales Engr., United Iron Wks.
- Beecher, Henry Ward (Junior), Mgr. Seattle Office, Chas. C. Moore & Co., 618 Mut. Life Bldg.
- Bushnell, Leonard T. (Junior), Secy. and Treas., Rockwood Sprinkler Co., 208 Columbia St.
- Dyer, Robt. M., V. P. and Treas., Puget Sound Bridge & Dredging Co., 432-441 Central Bldg.
- Frechtling, Arthur Geo. (Junior), Salesman, Fairbanks, Morse & Co.; also, Tacoma.
- Hale, Robert M., Cons. Engr., 1011 Alaska Bldg.; also, Vancouver, B. C., Canada.
- Heffernan, John T., Pres. and Mgr., Heffernan Eng. Wks., 103 Railroad Ave.
- Hiles, A. Lionel, Ch. Engr. Hoisting and Min. Eng. Dept., Wash. Iron Wks.
- Rodgers, Myron Knox, Min. Engr., 2338 Tenth Ave., N.

WASHINGTON, Seattle (Continued).

Sumner, Henry W., Mech. Engr., 14 W. Connecticut St.
 Weber, Erwin L. F. (Junior), Engr., Design of Elec., Mech.
 and Sanitary Equip. of Bldgs., 826 Northern Bank Bldg.
 Wilson, Geo. Samuel (Junior), Asst. Prof. Mech. Engrg., Wash.
 Univ.

Spokane.—Carpenter, Charles Irving (Junior), Supvr. Mech.
 Drawing, Spokane Public Schs., 827 First Ave.; also, Chicago,
 Ill.

Fawcett, Wallace H. (Junior), 1002 Old Natl. Bank Bldg.
 Green, Chas. Henry (Junior), Cons. Engr., 525 Paulsen Bldg.
 Miller, Herman G., Mech. and Refrigerating Engr., Armstrong
 Mchy. Co.

Russell, Foster (Junior), Agt. Commer. Dept., Wash. Water
 Power Co.

Walla Walla.—Ferguson, W. Craig (Junior), Asst. Genl. Mgr.,
 The Gilbert Hunt Co.

Hunt, Eugene Alexander (Junior), Treas. and Genl. Mgr., The
 Gilbert Hunt Co.

WEST VIRGINIA

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 man, Charleston Elec. Supply Co.

Ward, Charles, Cons. Engr., Charles Ward Engrg. Wks.

Ward, Charles E., Pres. and Genl. Mgr., Charles Ward Engrg.
 Wks.

Morgantown.—Church, Edwin Fayette, Jr., Prof. Mch. Design and
 Constr., W. Va. Univ.

Emory, Frederick L., Prof. Mechanics and Applied Mathe-
 matics, W. Va. Univ.

Jones, Clement R., Dean College of Engrg., W. Va. Univ.

Parkersburg.—Miller, Frank Louis, Ch. Engr., Parkersburg Mch.
 Co.

Wheeling.—Scott, Walter G. (Junior), Wheeling Mold & Fdy. Co.
 Thomson, Francis du Pont, Cons. Engr., Wheeling Mold &
 Fdy. Co.

WISCONSIN

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 Hargrave, Russell William (Junior), Traveling Rep., Extension
 Div., Univ. of Wis., P. O. Box 223.

Ashland.—Johnson, J. E., Jr., Mgr., Lake Superior Iron & Chem.
 Co.

Beloit.—Bachelder, Joseph Elmer (Junior), Mgr. Steam Pump
 Mfg. Dept., Fairbanks, Morse Mfg. Co.

Hobart, Frank G., Ch. Engr., Fairbanks, Morse Mfg. Co.

Mitchell, Charles J., Ch. Draftsman, Fairbanks, Morse Mfg. Co.

Vail, Jesse A., Genl. Mgr., Fairbanks, Morse Mfg. Co.

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 and Cement Mchy. Dept., Power & Min. Mchy. Co.

Bird, John D., Genl. Mgr., Power & Min. Mchy. Co.

Watkins, Frank Elias, Asst. Mgr., Power & Min. Mchy. Co.,
 Internatl. Gas Eng. Co.

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Weimer, Hugo W. (Junior), Engr. Min. and Smelting Sales Dept., Power & Min. Mchy. Co.

De Pere.—Brown, James Monroe, Supt., Lyons Boiler Wks.

Lyons, James W., Pres., Lyons Boiler Wks.

La Crosse.—Funk, Wm. Francis, Secy., La Crosse Boiler Co., Gould and Mill Sts.

Hirshheimer, Harry Julius, V. P., La Crosse Plow Co.

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Bond, Francis M. (Junior), In Charge, Section of Wood Preservation, Forest Products Lab.

Christie, Alexander G., Asst. Prof. Steam Engrg., Univ. of Wis.

Corp, Chas. I. (Junior), Asst. Prof. Hyd. Engrg., Univ. of Wis.

Elliott, Ben. G. (Junior), Fellow in Mech. Engrg., Univ. of Wis., Engr. Bldg.

Goddard, Arthur L., Supt. of Shops, Univ. of Wis.

Gore, Warren W., Ch. Engr., Fuller & Johnson Mfg. Co.

Johnson, Carl Albert, Pres., Gisholt Mch. Co.

Johnson, Hobart Stanley, V. P. and Genl. Supt., Gisholt Mch. Co.

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Mead, Daniel W., Prof. Hyd. and Sanitary Engrg., Univ. of Wis., Cons. Engr., 530 State St.

Nelson, Ernest Benjamin (Junior), 525 W. Dayton St.

Reber, Louis E., Dean Univ. Extension Div., Univ. of Wis.

Rowse, William Crapo (Junior), Instr. Steam and Gas Engrg., Univ. of Wis.

Thomas, Carl C., Prof. Steam and Gas Engrg., Univ. of Wis.

Thorkelson, Halsten Joseph, Assoc. Prof. Steam Engrg., Univ. of Wis.

White, John Culbertson, Cons. Steam and Ch. Operating Engr., Capitol Power Plant.

Milwaukee.—Arnold, Edwin E., Cons. Engr., A. O. Smith Co.

Bean, Irving McC. (Junior), Pres., Milwaukee Boiler Co., 629 Wells Bldg.

Beck, Matthias A., 294 Greenbush St.

Berresford, Arthur W., V. P. and Genl. Mgr., The Cutler-Hammer Mfg. Co.

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Bolles, Frank G., Mgr. and Editor, The Excavating Engineer, 267 National Ave.

Bonner, Richard Oliver (Junior), Nordberg Mfg. Co.

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Conrad, Hugh Vincent, Natl. Brake & Elec. Co.

Conway, Geo. M., Cons. Engr. and Expt., Rm. 38, 204 Grand Ave.

Cooley, Hugh Nelson, 3414 Cedar St.

Dahlstrand, Hans, Mech. Engr., Steam Turbine Engrg. Dept., Allis-Chalmers Co.

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- Dorner, Frederick Harry, Secy., Power Improvement Co., 510 Enterprise Bldg.
- Dravo, Geo. P., Pres., Power Improvement Co., 510 Enterprise Bldg.
- Erskine, John Stevenson (Junior), Draftsman Gasoline Eng. Dept., Internatl. Harvester Co.
- Frank, Edwin (Junior), 2300 Grand Ave.
- Gerry, Edward Murray, Commer. Elec. Engr., Allis-Chalmers Co.
- Greenwall, Walter L., Ch. Draftsman, Nordberg Mfg. Co.
- Greger, Henrik (Junior), Asst. Engr., Fred. M. Prescott Steam Pump Co.
- Haddock, Edwin Jos., Ch. Engr., The T. L. Smith Co., and The Smith & Post Co.
- Henderson, Clark T. (Junior), Elec. and Mech. Engr., The Cutler Hammer Mfg. Co.
- Holl, Chas. L. (Junior), Jos. Schlitz Brewing Co.; also, Streator, Ill.
- Housum, Chenoweth, Allis-Chalmers Co.
- Johnson, Paul F., Secy. and Treas., Johnson Service Co.
- Kollberg, Gustaf Leonard, Engr. Pumping Eng. Dept., Allis-Chalmers Co.
- Kremer, Waldemar Rudolph, Elec., Refrigerating and Mech. Engr., Vilter Mfg. Co., 872 Clinton St.
- Lathrop, William Frederic (Junior), Asst. to Ch. Engr. of Power Plant, The Milwaukee Elec. Ry. & Ltg. Co., 316 Pub. Service Bldg.
- McDewell, Horatio S. (Junior), Gas Eng. Erecting Engr., Allis-Chalmers Co.; also, New York, N. Y.
- McKee, Robert A., Mgr. and Ch. Engr. Steam Turbine Dept., Allis-Chalmers Co.
- Magin, Frank W. (Junior), Genl. Mgr. and Secy., Independent Elec. Mfg. Co., 299 Third St.
- Michel, Frederik Adolf (Junior), Checker and Charge of Squad, Milwaukee Bridge Co.
- Nordberg, Bruno Victor, Pres. and Ch. Engr., Nordberg Mfg. Co.
- O'Neil, Frederick Wm., Mgr. of Sales, Nordberg Mfg. Co.
- Packard, Horace Nelson (Junior), Engr., Cutler Hammer Mfg. Co.
- Patitz, J. F. Max, Cons. Mech. Engr., Allis-Chalmers Co.
- Pierpont, R., Factory Mgr., Wis. Motor Mfg. Co.
- Powell, William Henry, Elec. Engr. in Charge, Allis-Chalmers Co.
- Prescott, Fred. M., Pres., Fred. M. Prescott Steam Pump Co., 60th and Greenfield Aves.
- Reynolds, Irving H., Allis-Chalmers Co.
- Roberts, A. L., Designer and Mech. Engr., Pawling & Harnischfeger Co.
- Sando, Will J., Cons. Engr., Milwaukee Club.
- Sederholm, E. T., Asst. Ch. Engr., Nordberg Mfg. Co.
- Shadall, Charles Edward, Mech. Engr. and Designer, Nordberg Mfg. Co.
- Shaw, Charles H., West. Sales Mgr., Potter & Johnston Mch. Co., 967 National Ave.

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- Shodron, John Geo. (Junior), Cons. Engr. and Arch., 220 Burrell St.
- Simon, Arthur, Elec. Engr., Cutler Hammer Mfg. Co.
- Sprado, Carl G., Engr. in Charge Gas and Blowing Eng. Dept., Allis-Chalmers Co.
- Strothman, Louis E., Mgr. and Ch. Engr. Pumping Eng. Dept., Allis-Chalmers Co.
- Tribe, James, Allis-Chalmers Co.
- Uihlein, William B. (Junior), Genl. Supt., Jos. Schlitz Brewing Co.
- Vogt, Robert Friedrich, Mech. Engr. Cons. Engrg. Dept., Allis-Chalmers Co.
- Warg, Robert, Natl. Blower Wks., 17th St. and St. Paul Ave.
- Wehner, Lewis, Engr., Pawling & Harnischfeger Co., 38th St. and National Ave.
- Weickel, Henry, Ch. Engr., Pawling & Harnischfeger Co., 38th St. and National Ave.
- Wetmore, Charles P., Genl. Supt., Dial Cash Register Co., 409-415 Third St.
- White, Wm. M., Mgr. and Ch. Engr. Hyd. Dept., Allis-Chalmers Co.
- Whittemore, D. J., Cons. Engr., C. M. & St. P. Ry. Co., 222 Biddle St.
- Wintzer, Rudolph, 685 Farwell Ave.
- Woody, Guy Vimont (Junior), Mech. Engr., Allis-Chalmers Co.
- Worden, Euclid P., Ch. Engr., Fred M. Prescott Steam Pump Co.
- Wyman, Arthur H. (Junior), Sales and Estimating Engr., Allis-Chalmers Co.
- Young, William A., Ch. Draftsman, Pawling & Harnischfeger Co.

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North Fond du Lac.—Kipp, Alfred Ristine, Mech. Supt., Soo Line.
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Hamilton, Clinton A., Genl. Mgr. and V. P., Wis. Eng. Co.

MacGregor, Wallace F. (Junior), Supt. Exper. Dept., J. I. Case Threshing Mch. Co.

Sponsel, Charles W., Factory Supt., J. I. Case Threshing Mch. Co., Motor Wks.

South Milwaukee.—Coleman, William Wheeler, Pres., Bucyrus Co.
Ferris, Walter, Ch. Engr., Bucyrus Co.

Massey, Geo. Bragg, 2d (Junior), Bucyrus Co.

Roys, Lawrence (Junior), Supt. Outside Constr., Bucyrus Co.

West Allis.—Freyn, Heinrich Josef Karl, Cons. Engr., Allis-Chalmers Co.

McKinnon, William R. (Junior), Hyd. Dept., Allis-Chalmers Co.

Meharg, Laurence (Junior), Estimator, Allis-Chalmers Co.

Search, Charles Edwin, Mgr. of Wks., Allis-Chalmers Co.

Smith, L. P. C. (Junior), Ch. Draftsman Gas Eng. Dept., Allis-Chalmers Co.

WYOMING

- Laramie.**—Hoefler, Elmer Geo., Prof. Mech. Engrg., Univ. of Wyo.
Powell.—Aldrich, William Sleeper, U. S. Reclamation Service.

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- Bulawayo, Rhodesia, South Africa.**—Carter, William Arthur, Ch. Erector, Johnson & Fletcher.
Cape Colony, South Africa.—Park, Walter E., Managing Dir., The Tex. Co., Ltd., Cape Town.
Graaff Reinet, South Africa.—Williams, Edwin Hawkins, Managing Owner, Genl. Engrg. Wks., Somerset St.
Johannesburg, Transvaal, South Africa.—Bateman, Edward L., Mgr. for S. A. Allis-Chalmers Co., Box 6659.
 Blanchard, Henry Willby, Mgr. Austral Iron Wks., E. W. Tarry Co., Ltd., P. O. Box 1098.
 Bulkley, J. Norman, Cons. Elec. Engr., Genl. Min. & Finance Corp.
 Cook, J. F., Cons. Mech. Engr., S. Neumann & Co., and The Consld. Mines Selection Co., Ltd., 54 Cullinan Bldg.
 Farrar, Edward, Cons. Mech. Engr., Genl. Min. & Finance Corp.
 Orr, John, Prof. of Engrg., S. A. Sch. of Mines and Tech., P. O. Box 1176.
 Reunert, Theodore, Engr., Senior Partner, Reunert & Lenz, Box 92; also, care of Findlay, Durham & Brodie, 110 Cannon St., London, E. C., England.
 Rogers, Charles Edward, Genl. Mgr., Fraser & Chalmers, Ltd., Corner House.
 Vaughan, John Alfred, Ch. Inspr. Mchy., Box 1132.
Kimberly, Cape Colony, South Africa.—Williams, Alpheus Fuller, Genl. Mgr., De Beers Consld. Mines, Ltd.
Muhorini, British East Africa.—Penruddocke, J. H., Mech. Engr., Farm 1464.

AUSTRALIA

- Brisbane.**—Palmer, Arthur C. H., Asst. Engr., Queensland Ry.
Cairns, North Queensland.—Hartill-Law, A., Phoenix Fdy. & Eng. Wks., Spence St.
Castlemaine, Victoria.—Dam, William Valdemar, Genl. Mgr., Thompson & Co.
 Henry, Joseph Samuel, Cons. Engr.
 Thompson, David, Min. and Cons. Engr., P. O. Box 9.
Melbourne, Victoria.—Gray, John Lamont, Gray Bros.
 Noyes, Henry, Governing Dir., Noyes Bros., Ltd., 499-501 Bourke St.
 Smith, S. H., Supt., North Melbourne Elec. Tramways & Ltg. Co., Ltd., Mt. Alexander Rd.
Sydney, N. S. W.—Price, Norman I. (Junior), Price & Martyn, 68½ Pitt St.
 Strauss, Julian B., Partner, Sachs, Strauss & Co., Bulletin Place 2.

AUSTRIA

Wiener-Neustadt.—Arbogast, Victor R., Wks. Mgr., Natl. Radiator Gesellschaft, Postfach 95.

Witkowitz.—Eyer mann, Peter, Engr. of Constr., Witkowitz Steel Wks.

BELGIUM

Brussels.—Sahlin, Axel, Res. Dir., Julian Kennedy, Sahlin & Co., Ltd., 52 Rue du Congrès.

Vander, Willigen, T. A., Rep., Humphreys & Glasgow, Ltd., 209 Chaussée d'Ixelles.

Zimmerman, Oliver B., Advisory Engr., Internatl. Harvester Co., 11-13 Rue D'Arenberg.

Ghent.—Baker, Dickerson G., Dir. Genl. Fabrication, Carels Frères.

Liege.—Dwelshauvers-Dery, V., Prof. Emeritus at Univ. of Liege, 4, Quai Marcellis.

Hubert, Herman, Genl. Inspr. of Mines, Prof. Applied Mechanics and Industrial Physics, Univ. of Liege.

CANADA

Amherst, Nova Scotia.—Robb, A. G., Ch. Engr., Internatl. Engrg. Wks.

Dundas, Ontario.—Williams, George W., Mgr., Chapman Eng. & Mfg. Co.

Edmonton, Alberta.—Libby, Malcolm, P. O. Box 235.

Fraserville, Quebec.—Warren, Kenneth L., Cons. Engr.

Galt, Ontario.—Goldie, Alexander R. (Junior), Mgr., Goldie & McCulloch Co., Ltd.

Spotton, Arthur Knowlson (Junior), Ch. Engr., Goldie & McCulloch Co., Ltd.

Glace Bay, Nova Scotia.—Whyte, John S., Mech. Engr., Dominion Coal Co., Ltd.

Hamilton, Ontario.—Hawkins, Wm. Clark (Junior), Managing Dir. and Secy., Dominion Power & Transmission Co., Ltd.

Lattin, Judson, M. M., Internatl. Harvester Co. of Canada, Ltd.

Smart, Richard Addison, Canadian Home Land Co., Ltd., Bank of Hamilton Chambers.

Tiplady, John T., Canadian Westinghouse Co.

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Willhofft, F. O., Prof. Mech. Engrg., Queen's Univ.

Lethbridge, Alberta.—Magrath, Charles Boltoft (Junior), The Lethbridge Iron Wks., Ltd.

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Leonard, E. Ibbotson (Junior), Asst. Supt., E. Leonard & Sons.

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Montreal, Quebec.—Atwood, William S., Ch. Engr., Canadian Car & Fdy. Co., Ltd., and Canadian Steel Foundries, Ltd., Transportation Bldg.

Brown, Stephen Pearson, Ch. Engr., Canadian No. Montreal Tunnel & Terminal Co., Ltd., and Managing Engr., Montreal Tunnel & Terminal Constr. for Mackenzie, Mann & Co., Ltd., 411 Dorchester St., W.

CANADA, Montreal, Quebec (Continued).

- Butler, Matthew Joseph, Windsor Hotel.
 Clergue, Bertrand J., Canadian Express Bldg.
 Durley, Richard John, Member of Firm, MacMullen, Riley & Durley, 4 Beaver Hall Sq.
 Farmer, John T. (Junior), Mech. and Hyd. Engr., 427 Coristine Bldg.
 Glasgow, Carr L. (Junior), Dist. Mgr., Allis-Chalmers-Bullock, Ltd., 613 Canadian Express Bldg.
 Harding, Frank Welland, Cons. Engr., Canadian Consldt. Rubber Co., Ltd., Notre Dame St. and Papineau Ave.
 Hood, Warren Blake (Junior), Genl. Shop Insp., Canadian Pacific Ry. Co.
 Jaquays, Homer Morton, Ch. Engr. Montreal Branch, The Steel Co. of Canada, Ltd., 1272 Notre Dame St.
 Lancaster, W. C., Elec. and Mech. Engr., Mackenzie Mann & Co., Ltd., 411 Dorchester St., W.
 Lane, Frederick, Supt., Railway Signal Co. of Canada, Ltd., 508 Canadian Express Bldg.
 Larkin, A. C., Asst. Mgr., Canada, Babcock & Wilcox Co., Ltd., St. Henry.
 Ord, Henry C., 105 St. Luke St.
 Ritchie, Francis P., 237 Villeneuve St., W.
 Robinson, A. W., Cons. Mech. Engr., 14 Phillips Sq.
 Tagge, Arthur C., Genl. Supt., Canada Cement Co., Ltd.
 Vaughan, Henry H., Asst. to V. P., Canadian Pacific Ry.
 Winterrowd, William H. (Junior), Mech. Engr., Canadian Pacific Ry.
York, John James, Ch. Engr., St. Lawrence Sugar Refining Co.
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 Sangster, Andrew, Supt., Canadian Rand Co., Ltd.
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 Angus, Robert W., Prof. Mech. Engrg., Faculty Applied Science and Engrg., Univ. of Toronto.
 Clark, Farley Granger, Ch. Engr., Toronto Power Co., Toronto Elec. Light Co., Toronto St. Ry. Co.
 Fabens, Andrew Lawrie (Junior), Supt., No. Aluminum Co., Ltd., Sterling Rd.
 Fletemeyer, Louis H. (Junior), Mech. Engr., 163 Grenadier Rd.

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Hudson, Frederick W., Engrg. Dept., Canada Fdy. Co., Ltd., Davenport Wks.

Kemble, Parker H., Genl. Sales Mgr., Toronto Elec. Light Co.

Milne, James, Cons. Engr., City Hall.

Osborne, G. F. F., Box 84, Genl. P. O.

Scollan, John Joseph, Genl. Supt., Canada Fdy. Co., Ltd.

Sowden, Parkin T. (Junior), Mech. Engr., Stand. Silver Co., Ltd., North Madison Ave.

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Vancouver, B. C.—Day, Paul, Treas., Federal Lumber Co., 920-921 Rogers Bldg.

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Sawford, Frank, Elec. Engr., Canadian Collieries (Dunsmuir), Ltd.

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CENTRAL AMERICA

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Hider, George Turner (Junior), Mech. Draftsman, Isthmian Canal Com.; also, Greenville, Miss.

Owens, Charles Trump, Supv. Engr., Dredging Fleet.

Culebra, Canal Zone.—Lee, Ernest Eugene, Supt. of Erection, Dept. of Constr. and Engrg., Isthmian Canal Com.

Schildhauer, Edward, Elec. and Mech. Engr., Isthmian Canal Com.

Gorgona, Canal Zone.—Regan, Ralph Howard (Junior), Asst. Testing Engr., Isthmian Canal Com.

Robinson, Arthur L., Supt. Mech. Div., Isthmian Canal Com.; also, Louisville, Ky.

Whipple, C. Earl, Ch. Draftsman Mech. Div., Isthmian Canal Com.

Pedro Miguel, Canal Zone.—Quick, Ray Lewis (Junior), Isthmian Canal Com.; also, Ithaca, N. Y.

San Jose, Costa Rica.—Purdy, Henry T., Mgr., Purdy Engrg. Co.

CHANNEL ISLANDS

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CHINA

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Tongshan.—Sze, S. C. Thomas (Junior), Imperial Rys. of North China.

CUBA

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Havana.—Durant, Aldrich (Junior), Res. Engr., MacArthur-Perks Co., Ltd.

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Estrada, Rafael, Cons. Engr., Calzada 78 B, Vedado.

Mantanzas.—Polledo, Y. (Junior), Manzaneda 16.

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Bland, John P., Printer and Ch. Engr., The Times.

Brenner, Wm. H., Managing Dir., Electromotor Equip. Co., Ltd., 59-65 Paul St., Finsbury, E. C.; also, Atlanta, Ga.

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ENGLAND, London (Continued).

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FEDERATED MALAY STATES

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FINLAND

Abo.—Heikel, Daniel August, Mech. Engr.

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- Munich.**—Diesel, Dr. Rudolph, Maria-Theresiastr. 32.
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Mexico City, D. F.—Arozarena, Rafael M. de, Engr. and Contr., 3a. Calle de las Estaciones No. 44.

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Vera Cruz.—Clarke, Philip L. (Junior), Ch. Electrician, Mexican Sugar Refining Co., Ingenio Santa Fe, Tlacotalpan.

Zamora, Michoacan.—Appleton, Wm. Day (Junior), Supt., The Guanajuato Power & Elec. Co., Apartado 23.

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St. Petersburg.—Smith, Wm. Edward, Pres., Swedish Portland Cement Mfg. Co., P. O. Box 263.

Weinberg, Semen G., Min. Engr., Mgr., Worthington Pump Co., Ltd.

Sormova, Nr. Nijni Novgorod.—Blum, Arthur N., Mgr., Sormovo Co., Engrg. Steel Wks. & Shipyard.

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SOUTH AMERICA

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- Buenos Ayres, Argentine Republic.**—Corlette, Glen H. (Junior), Fairbanks, Morse & Co., 566 Calle Moreno.
Tregelles, Henry, Bartolomé, Mitre 544.
- Chorrillos, Peru.**—D'Ornellas, T. V., Elec. Cons. Engr., Peruvian Gov., Calle de Lima 15.
- Guayaquil, Ecuador.**—Carbo, Luis Alberto (Junior), Ch. Engr., Guayaquil Sewer and Water Bd., P. O. Box 15.
- La Fundicion, Peru.**—Roper, Norman Brownell, Mech. Supt., Cerro de Pasco Min. Co.; also, Santa Ana, Cal.
- Lima, Peru.**—Marquina, Louis G., Engr., Peruvian Corp., Ltd.
Martinto, Pedro, Apartado 146.
Wagner, Emilio F., Engr., Coca 76.
- Bancagua, Chili.**—Haff, Raymond E. T. (Junior), Braden Copper Co.
Stockwell, Rupert Kennedy (Junior), Ch. Engr., Braden Copper Co.; also, Salt Lake City, Utah.
- Rio de Janeiro, Brazil.**—Barboza, Arthur S., Rua Senador Pompeu 268, E. F. C. B.
- Cranston, Robert E., Caixa Postal 834; also, San Francisco, Cal.
- Sao Paulo, Brazil.**—Head, Francis, Engr. of Constr., The Sao Paulo Tramway, Light & Power Co., Ltd.
Hillman, Cecil Robert, Loco. Supt., Sao Paulo Ry. Co.
Walmsley, W. N., Genl. Mgr., Sao Paulo Tramway, Light & Power Co., Ltd.

SPAIN

- Barcelona.**—Billings, A. W. K., Managing Dir., Ebro Irrigation & Power Co., Ltd., Apartado 491; also, New York, N. Y.
Braun, Horace Herbert (Junior), Constr. Engr., Cia Reigos & Fuerza del Ebro, Apartado 491; also, Los Angeles, Cal.
- Tremp, Lerida.**—Kniskern, W. H. (Junior), Apartado 1.

SWEDEN

- Kallinge.**—Trotz, J. O., Emanuel, Managing Dir., Kockums Jernverks, Akth.
- Stockholm.**—Angstrom, Carl, Cons. Engr., Skepparegatan 5.
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- Winterthur.**—Meier, Konrad, Htg. and Ventilating Engr., 12 Tachlisbrunnen St.
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- Zurich.**—Spoerri, Henry, Mech. Cons. Engr., Spoerri & Co., Bergstrasse 76.

TURKEY

- Constantinople.**—Scipio, Lynn A., Robert College.

PRESENT ADDRESS UNKNOWN

Aldrich, J. Guy (Junior).
Banta, Earle Jackson.
Berry, Edgar H.
Greene, Isaac Chase.
Hand, S. Ashton.

SUMMARY OF MEMBERSHIP BY RESIDENCE

UNITED STATES

Alabama	26	Nevada	3
Alaska	2	New Hampshire	14
Arizona	7	New Jersey	214
Arkansas	2	New Mexico	4
California	113	New York	1209
Colorado	32	North Carolina	17
Connecticut	169	North Dakota	3
Delaware	21	Ohio	296
District of Columbia....	36	Oklahoma	2
Florida	2	Oregon	12
Georgia	22	Pennsylvania	520
Hawaii	6	Philippine Islands	2
Idaho	5	Porto Rico	5
Illinois	300	Rhode Island	74
Indiana	68	South Carolina	6
Iowa	15	South Dakota	1
Kansas	12	Tennessee	15
Kentucky	5	Texas	25
Louisiana	29	Utah	9
Maine	19	Vermont	17
Maryland	39	Virginia	35
Massachusetts	430	Washington	22
Michigan	151	West Virginia	9
Minnesota	30	Wisconsin	116
Mississippi	3	Wyoming	2
Missouri	78		
Montana	7		
Nebraska	7	Total	4268

FOREIGN COUNTRIES

Africa	14	Holland	1
Australia	10	India	4
Austria	2	Italy	3
Belgium	6	Japan	5
Canada	68	Mexico	12
Central America	12	Russia	4
Channel Islands	1	Scotland	2
China	3	South America	16
Cuba	6	Spain	3
England	57	Sweden	5
Federated Malay States	1	Switzerland	3
Finland	2	Turkey	1
France	11		
Germany	17	Total	269

Membership in United States.....	4268
Membership in foreign countries.....	269
Present address unknown.....	5
Total membership	4542

MEMBERSHIP BY GRADES

Honorary Members	19
Members	3098
Associates	347
Juniors	1078
Total Membership	4542

THE AMERICAN SOCIETY OF
MECHANICAL ENGINEERS

GAS POWER SECTION

LIST OF AFFILIATES
ARRANGED ALPHABETICALLY AND
GEOGRAPHICALLY

Formed Under Article 53 of the Constitution

OFFICERS OF THE GAS POWER SECTION

1913

Chairman, F. R. HUTTON

Secretary, GEO. A. ORROK

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 Pub. Service Bldg.
 Patitz, J. F. Max, Mem.Am.Soc.M.E.
 Sprado, Carl G., Mem.Am.Soc.M.E.
Oshkosh.—Monahan, Louis J., Mem.Am.Soc.M.E.
West Allis.—Freyn, Heinrich Josef Karl, Mem.Am.Soc.M.E.
Racine.—Hamilton, Clinton A., Mem.Am.Soc.M.E.

FOREIGN COUNTRIES

BELGIUM

Brussels.—Zimmerman, Oliver B., Mem.Am.Soc.M.E.

CANADA

Galt, Ont.—Goldie, Alexander R., Mem.Am.Soc.M.E.

Spotton, Arthur Knowlson, Mem.Am.Soc.M.E.

Victoria, B. C.—Lee, Francis V. T., Mem.Am.Soc.M.E.

ENGLAND

London.—Wilkinson, C. T., Mem.Am.Soc.M.E.

FRANCE

Paris.—Thorn, Charles Norman, Mem.Am.Soc.M.E.

GERMANY

Aachen.—Langer, Paul, Mem.Am.Soc.M.E.

Hamburg.—Rieppel, Dr. Paul, Ch. Engr., Blohm & Voss.

JAPAN

Yokosuka.—Onuki, Riojo, Yokosuka Naval Dock Yard.

MEXICO

Merida, Yucatan.—Blake, Frederick W., Genl. Mgr., United Rys. of Yucatan.

SOUTH AMERICA

Buenos Aires, Argentine Republic.—Corlette, Glen H., Mem.Am. Soc.M.E.

Jacob, Fred, Jr., S. A. Rep., The Fairbanks Co., Casilla 1628.

PRESENT ADDRESS UNKNOWN

Fuller, Edgar H.

GAS POWER SECTION

Summary of Membership by Residence

UNITED STATES

Alabama	3	New Hampshire	1
Arkansas	1	New Jersey	13
California	9	New York	141
Connecticut	8	Ohio	22
Delaware	1	Oklahoma	1
District of Columbia.....	3	Oregon	2
Georgia	3	Pennsylvania	40
Illinois	20	Rhode Island	6
Indiana	11	Texas	1
Iowa	2	Utah	1
Maine	3	Vermont	1
Maryland	2	Virginia	1
Massachusetts	22	Washington	2
Michigan	13	West Virginia	2
Minnesota	5	Wisconsin	17
Missouri	7		
Nebraska	1	Total	364

FOREIGN COUNTRIES

Belgium	1	Japan	1
Canada	3	Mexico	1
England	1	South America	2
France	1		
Germany	2	Total	12

Membership in United States.....	364
Membership in foreign countries.....	12
Address unknown	1
Total membership	377

MEMBERSHIP BY GRADES

Members of the Society.....	263
Affiliates	114
Total	377

RESEARCH REPORT

THE EFFECT OF ...

ON ...



Figure 1: A line graph showing the relationship between two variables.

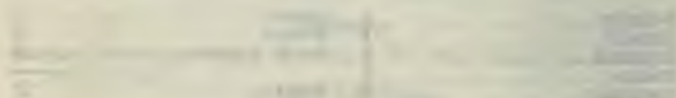


Figure 2: A line graph showing the relationship between two variables.

The following table shows the data points for Figure 1 and Figure 2.

Table 1: Data points for Figure 1

Table 2: Data points for Figure 2

The following table shows the data points for Figure 1 and Figure 2.

Table 3: Data points for Figure 1

Table 4: Data points for Figure 2

THE AMERICAN SOCIETY OF
MECHANICAL ENGINEERS

STUDENT MEMBERSHIP

LISTS OF AFFILIATES
BY COLLEGES

Formed Under Rules 27 to 34

OFFICERS OF STUDENT BRANCHES

Institution	Date Authorized by Council	Honorary Chairman	Chairman and Secretary
Armour Institute of Tech., Chicago, Ill.....	1909	G. F. Gebhardt.....	E. R. Burley, Jr. H. R. Kuehn
Columbia University, New York, N. Y.....	1909	Chas. E. Lucke.....	E. M. Stone E. A. Jareckie
Cornell University, Ithaca, N. Y.....	1908	R. C. Carpenter.....	S. D. Mills D. S. Wegg, Jr.
Lehigh University, South Bethlehem, Pa.....	1911	P. B. de Schweinitz..	E. E. Finn J. F. Beers, Jr.
Leland Stanford Jr. University, Palo Alto, Cal. . .	1909	W. F. Durand.....	C. W. Scholefield V. W. Winters
Mass. Institute of Tech., Boston, Mass.....	1909	E. F. Miller.....	J. G. Russell J. B. Farwell
New York University, New York, N. Y.....	1909	C. E. Houghton.....	
Ohio State Univ., Columbus, Ohio.....	1911	Wm. T. Magruder....	R. H. Neilan R. M. Powell
Pa. State College, State College, Pa.....	1909	J. P. Jackson.....	J. F. Blank G. W. Barger
Polytechnic Institute of Brooklyn, Brooklyn, N. Y.	1909	W. D. Ennis.....	B. L. Heustis A. Bielek
Purdue University, Lafayette, Ind.....	1909	G. A. Young.....	A. W. Kimmel G. F. Lynde
Rensselaer Poly. Institute, Troy, N. Y.....	1910	A. M. Greene, Jr....	E. Kneass R. F. Fox
State University of Kentucky, Lexington, Ky.....	1911	F. P. Anderson.....	R. R. Taliaferro F. J. Forsyth
Stevens Institute of Tech., Hoboken, N. J.....	1908	Alex. C. Humphreys.	J. H. Vander Veer J. Strauss
Syracuse University, Syracuse, N. Y.....	1912	W. E. Ninde.....	O. W. Sanderson R. A. Sherwood
Univ. of Arkansas, Fayetteville, Ark.....	1910	B. N. Wilson.....	M. McGill C. Bethel
University of California, Berkeley, Cal.....	1912	Joseph N. Le Conte	J. F. Ball G. H. Hagar
University of Cincinnati, Cincinnati, O.....	1909	J. T. Faig.....	C. W. Lytle A. O. Hurxthal
University of Illinois, Urbana, Ill.....	1909	W. F. M. Goss.....	L. G. Smith C. A. Schoessel
University of Kansas, Lawrence, Kan.....	1909	F. W. Sibley.....	E. A. VanHouten L. E. Knerr
University of Maine, Orono, Me.....	1910	Arthur C. Jewett....	E. H. Bigelow O. H. Davis
University of Missouri, Columbia, Mo.....	1909	H. Wade Hibbard...	F. I. Kemp R. Runge
University of Nebraska, Lincoln, Neb.....	1909	J. D. Hoffman.....	P. S. Toney M. C. Evans
University of Wisconsin, Madison, Wis.....	1909	A. G. Christie.....	W. D. Moyer W. K. Fitch
Washington University, St. Louis, Mo.....	1911	E. L. Ohle.....	D. Southerland A. Schleiffarth
Yale University, New Haven, Conn.....	1910	L. P. Breckenridge...	C. E. Booth O. D. Covell

AFFILIATES OF STUDENT BRANCHES

ARMOUR INSTITUTE OF TECHNOLOGY

Chicago, Ill.

- BEERBAUM, A. J. (Student, 1911), 3353 Lincoln Ave.
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BURLEY, E. R. (Student, 1911), 5463 Madison Ave.
DROZESKI, D. A. (Student, 1912), 707 Forrest Ave., Evanston.
EVANS, P. W. (Student, 1911), 3142 Michigan Ave.
GRIFFITH, F. H. (Student, 1909), 3327 Armour Ave.
KEACHIE, P. L. (Student, 1911), 1190 Brush St., Detroit, Mich.
KEHR, C. F. (Student, 1911), 3839 Grand Blvd.
PHILLEO, L. H. (Student, 1911), 6626 Kimbark Ave.
RUEF, John (Student, 1911), 6044 Michigan Ave.
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STEWARD, W. H. (Student, 1911), 3249 Wabash Ave.
WINTERCORN, J. (Student, 1911), 125 W. 110th Pl.

COLUMBIA UNIVERSITY

New York, N. Y.

- BAUM, Albert L. (Student, 1910), Nygren Tenney & Ohmes, 87 Nassau St.
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BLUMENFELD, Ralph (Student, 1910), 24 Baker St., Lynn, Mass.
BRETTELL, Clinton (Student, 1910), 423 West Ave., Bridgeport, Conn.
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CLARK, S. M. (Student, 1910), 427 Franklin Ave., Brooklyn.
CONNER, B. F., Jr. (Student, 1912), 106 Barbey St., Brooklyn.
DEMOREST, W. J. (Student, 1910), 173 W. 93d St.
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ENTLEMAN, J. H. (Student, 1912), 333 Alexander Ave.
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GROSSBAUM, L. (Student, 1912), 831 Hunt's Point Ave.
HAYNES, J. L. (Student, 1910), 3216 Glenwood Rd., Brooklyn.
ISRAEL, A. H. (Student, 1910), 74 W. 92d St.
JAROS, A. L. (Student, 1910), 542 W. 112th St.
JENKINS, Harold B. (Student, 1910), 41 St. Nicholas Terrace.
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COLUMBIA UNIVERSITY, (Continued).

- KIRBY, Russell T. (Student, 1911), Hotel Walton, Philadelphia, Pa.
- KOHLBUSCH, A. H. (Student, 1911), 431 W. 117th St.
- LACY, F. T. (Student, 1910), 115 Nott Terrace, Schenectady.
- LEVKOWITS, A. (Student, 1911), 1070 Morris Ave.
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- McIVER, Francis F., Jr. (Student, 1911), 415 W. 118th St.
- MacCOULL, Neil, Jr. (Student, 1911), 537 W. 121st St.
- MONTGOMERY, G. L. (Student, 1910), 76 Morningside Drive.
- MOSHER, Edgar H. (Student, 1910), 1241 Arlington Ave., Plainfield, N. J.
- MURPHY, E. A. (Student, 1910), Livingston Hall, Columbia Univ.
- ROGOWSKI, B. W. (Student, 1910), 311 W. 137th St.
- SELLEW, W. H. (Student, 1910), 192 South Common, West Lynn, Mass.
- STONE, E. W. (Student, 1911), 1128 Bedford Ave., Brooklyn.
- STORK, W. L. (Student, 1912), 212 Hancock Ave., Jersey City, N. J.
- SWALLOW, Howard (Student, 1910), 605 W. 184th St.
- SYSKA, A. G. (Student, 1911), 100 W. 94th St.
- TAG, W. (Student, 1910), 511 Macon St.
- WEGENER, F. A. (Student, 1911), 546 W. 113th St.
- WILSON, W. J. (Student, 1911), Bergenfield, N. J.

CORNELL UNIVERSITY**Ithaca, N. Y.**

- ALLEN, Chas. C. (Student, 1909), Stone & Webster Engrg. Corp., 1017 Commonwealth Bank Bldg., Dallas, Tex.
- ALLEN, Chas. L. (Student, 1910), 5012 Vernon Ave., St. Louis, Mo.
- ANDERSON, A. A. (Student, 1910), 66 D St., Salt Lake City, Utah.
- ASHWORTH, P. P. (Student, 1912), 217 West Ave.
- ATWATER, Harry A. (Student, 1911), 11,130 Armida Ave., Morgan Park, Ill.
- BAEHR, Nathan (Student, 1910), 244 Riverside Drive, New York.
- BARR, J. H. (Student, 1911), 1 Central Ave.
- BEHRENS, C. N. (Student, 1911), present address unknown.
- BEHRENS, H. R. (Student, 1911), 29 S. 16th St., Harrisburg, Pa.
- BENITZ, L. R., Jr. (Student, 1911), Carmen Centrale, Vega Alta, P. R.
- BLACKBURN, H. C. (Student, 1912), 319 College Ave.
- BLINN, E. R. (Student, 1909), 1813 W. Genesee St., Syracuse.
- BOGARDUS, A. G. (Student, 1910), 6 South Ave.
- BOGERT, J. G. (Student, 1911), 107 Edgemoor Lane.

CORNELL UNIVERSITY (Continued).

- BONNEY, A. J. (Student, 1911), 306 College Ave.
 BOOTH, A. A. (Student, 1911), 304 Stewart Ave.
 BORDEN, W. A. (Student, 1911), 13 South Ave.
 BOWES, L. C. (Student, 1911), 201 Dryden Rd.
 BREWER, F. J. (Student, 1911), Apt. 3, 1420 Grand Ave., Milwaukee, Wis.
 BRONSON, C. E. (Student, 1910), present address unknown.
 BROWN, Roger Stuart (Student, 1912), 109 Catherine St.
 BUTLER, N. R. (Student, 1909), 25 W. Gum St., Hazelton, Pa.
 BUTLER, W. C. M. (Student, 1910), 819 W. Diamond Ave., Hazelton, Pa.
 CABASSA, J. L. (Student, 1911), 16 Cascadilla Park.
 CALDWELL, F. B. (Student, 1911), 177th St. and Western Ave., Chicago, Ill.
 CHAFFE, Jos. B., Jr. (Student, 1912), Ala. Power Co., Brown-Marx Bldg., Birmingham, Ala.
 CHAMBERS, Henry E. (Student, 1910), 29 Armine Pl., Buffalo.
 CHRISTY, Wm. G. (Student, 1910), 1828 Evergreen Ave., Alton, Ill.
 COCHRAN, R. L. (Student, 1911), 2444 Braddock Ave., Braddock, Pa.
 COFFIN, W. C. F. (Student, 1911), 116 Oak Ave.
 COLEMAN, E. H. (Student, 1911), 321 Dryden Rd.
 COLGATE, G. M. (Student, 1910), 303 E. 19th St., Indianapolis, Ind.
 COLINA, B. (Student, 1912), 215 Dryden Rd.
 CONANT, H. A. R. (Student, 1912), 128 Dryden Rd.
 CONSTAM, A. F. (Student, 1911), 205 Williams St.
 CORNWELL, H. V. (Student, 1912), 111 Osmun Pl.
 COUCH, A. D. (Student, 1912), 204 Stewart Ave.
 CRAIG, J. F. (Student, 1911), 600 University Ave.
 CURTIN, G. M. (Student, 1912), 401 Dryden Rd.
 CURTISS, G. W. (Student, 1911), present address unknown.
 DALEY, R. B. (Student, 1912), 116 Oak Ave.
 DAY, P. L. (Student, 1910), Yeronga, Brisbane, Australia.
 DEANS, W., Jr. (Student, 1911), 221 Eddy St.
 de REVERE, A. W. (Student, 1910), 606 S. Main St., Phoenixville, Pa.
 DOLL, W. E. (Student, 1911), care of Trahern Pump Co., Rockford, Ill.
 EASTWOOD, S. K. (Student, 1911), Huntington Club, 128 Dryden Rd.
 EVANS, G. J. (Student, 1911), 306 College Ave.
 FOGG, Walter S. (Student, 1911), 1909 Mt. Vernon St., Philadelphia, Pa.

CORNELL UNIVERSITY (Continued).

- FRANK, C. F. (Student, 1911), 148 Front St., Schenectady.
FREEMAN, H. S. (Student, 1912), 505 Dryden Rd.
FRIED, J. A. (Student, 1910), 91 Waite Ave.
GARNER, H. H. (Student, 1911), Claremont, Cal.
GARY, F. P. (Student, 1910), So. Cotton Oil Co., Charlotte, N. C.
GASS, K. W. (Student, 1911), 600 University Ave.
GOAN, Percival (Student, 1911), 415 Stewart Ave.
GRANT, J. M. (Student, 1910), The Brisbane Tramways Co.,
Brisbane, Australia.
GREEN, J. Birchard (Student, 1909), Acme Steel Goods Co.,
2834 Archer Ave., Chicago, Ill.
HALE, S. C. (Student, 1912), 42 Notre Dame St., Glen Falls.
HAM, C. W. (Student, 1910), 415 N. Cayuga St.
HAMANT, M. J. (Student, 1911), 206 College Ave.
HANFORD, W. B. (Student, 1911), 128 Dryden Rd.
HANNAM, G. C. (Student, 1911), Y. M. C. A. Bldg.
HARPER, C. W. (Student, 1911), care of Y. M. C. A., Peoria, Ill.
HARRINGTON, W. C. (Student, 1911), 401 Cascadilla Pl.
HENDRICKSON, G. S. (Student, 1911), Springfield Ave., Queens.
HESS, S. T. (Student, 1912), 123 Dryden Rd.
HILDRETH, K. E. (Student, 1911), 618 Stewart Ave.
HOFFMANN, Charles Barth (Student, 1911), 2619 Vine St., Apt.
F, Cincinnati, O.
HOPE, C. C. (Student, 1911), 304 Stewart Ave.
HUGHES, H. M. (Student, 1911), 15 South Ave.
HUNT, C. W. (Student, 1911), present address unknown.
HURD, P. E. (Student, 1911), 1 Central Ave.
HYDE, T. B. (Student, 1910), Natl. Carbon Co., Cleveland, O.
JACKMAN, E. T. (Student, 1912), 110 Sage Pl.
JOHNSON, A. L. (Student, 1912), Internatl. Paper Co., Glens
Falls.
JOHNSON, J. B. (Student, 1911), 123 Highland Pl.
JONES, Paul W. (Student, 1911), 51 Hamilton Pl., New York.
JONES, R. J. (Student, 1912), 204 Stewart Ave.
KEHL, R. J. (Student, 1911), 49 Sheldon Court.
KENNEDY, C. H. (Student, 1912), 232 Linden Ave.
KENT, R. H. (Student, 1911), 409 Dryden Rd.
KERR, J. L. (Student, 1911), 123 Linn St.
LANE, L. C. (Student, 1911), 618 Stewart Ave.
LAY, R. P. (Student, 1910), 210 Palmer Ave., Syracuse.
LEINROTH, J. P. (Student, 1911), 920 S. 48th St., Philadelphia,
Pa.
LEWIS, W. J., Jr. (Student, 1911), 335 Smith St., Brooklyn.
LINDSAY, H. D. (Student, 1909), 253 Farwell Ave., Milwaukee,
Wis.

CORNELL UNIVERSITY (Continued).

- LOVEJOY, F. A. (Student, 1911), 115 De Witt Pl.
- LYMAN, W. W. (Student, 1911), 90 Front St., Binghamton.
- LYNN, E. A. (Student, 1911), 820 Massachusetts Ave., Cambridge, Mass.
- LYON, Percy S. (Student, 1912), 963 St. Marks Ave., Brooklyn.
- McBRIDE, F. R. (Student, 1911), 301 Eddy St.
- McCUNE, J. C. (Student, 1910), 307 Hay St., Wilkinsburg, Pa.
- McELROY, R. C. (Student, 1911), P. O. Box 476, Erie, Pa.
- McNEAR, G. B. (Student, 1911), 777 Stewart Ave.
- MAGOUN, J. W. (Student, 1911), 110 Edgemoor Lane.
- MANN, V. E. (Student, 1911), 409 Dryden Rd.
- MATTHAI, J. F. (Student, 1911), 1403 Eutaw Pl., Baltimore, Md.
- MATTHEWS, Robertson (Student, 1910), 617 N. Cayuga St.
- MELVILLE, M. S. (Student, 1911), 303 E. Mill St.
- MERRIHEW, L. A. H. (Student, 1910), The Winton Motor Car Co., Cleveland, O.
- MILLER, B. H. (Student, 1912), 515 Stewart Ave.
- MILLER, J. G. (Student, 1911), 217 West Ave.
- MILLER, S. H. (Student, 1911), 107 Edgemoor Lane.
- MILLS, S. D. (Student, 1911), 712 Thurston Ave.
- MOFFAT, H. W. (Student, 1910), Sparrows Point, Md.
- MOLLESON, G. C. (Student, 1912), Kappa Psi House.
- MONTGOMERY, Stafford (Student, 1910), Riverside, Ill.
- MORSE, D. F. (Student, 1911), Salt Springs Rd., East Syracuse.
- MORSE, R. V. (Student, 1911), 512 Edgewood Pl.
- MUDGE, S. W. (Student, 1911), 111 Osmun Pl.
- MUMFORD, W. C., Jr. (Student, 1911), 144 Lincoln Pl., Brooklyn.
- NAGEL, C. F. (Student, 1911), 712 Thurston Ave.
- NEWCOMB, F. L. (Student, 1911), 409 Dryden Rd.
- NICHOLS, G. R. (Student, 1911), Hotel Metropole, Chicago, Ill.
- OLIN, F. W. (Student, 1911), 600 University Ave.
- OVEROCKER, Randall H. (Student, 1910), 333 Washington Pl., Hasbrouck Hgts., N. J.
- PALMER, R. M. (Student, 1911), Giorgetti-Cintrón-Aboy & Co., San Juan, Porto Rico.
- PAPPENHEIMER, R. (Student, 1910), 2322 Upland Pl., Cincinnati, O.
- PARMLEY, H. M. (Student, 1910), 507 N. Aurora St.
- PAULLIN, C. A. (Student, 1911), 309 College Ave.
- PEACH, P. L. (Student, 1909), 708 E. Seneca St.
- PERKINS, H. C. (Student, 1912), 212 Pleasant St.
- PERRY, L. J. (Student, 1911), 112 Orchard Pl.
- PETTIT, K. D. (Student, 1911), 107 Edgemoor Lane.
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CORNELL UNIVERSITY (Continued).

- POPE, C. J. (Student, 1911), 73 Prospect St., East Orange, N. J.
POPP, W. H. (Student, 1912), 103 Highland Pl.
PORTER, B. A. (Student, 1912), 110 Sage Pl.
PRATT, R. K. (Student, 1911), 401 Cascadilla Pl.
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RAMSEY, J. H. (Student, 1912), 321 Dryden Rd.
REBMAN, C. G. (Student, 1912), 614 E. Buffalo St.
REEVES, D. H. (Student, 1911), 409 Dryden Rd.
REICH, O. D. (Student, 1911), New Dorp, S. I.
RENTON, J. Lewis (Student, 1911), Ewa, Hawaii.
RICHARDSON, Lawrence (Student, 1909), 1105 14th Ave., Altoona, Pa.
ROBINSON, R. McL. (Student, 1911), R. F. D. 2, Box 40.
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ROWE, J. G., Jr. (Student, 1912), 638 Stewart Ave.
RUCKGABER, Otto (Student, 1911), 71 A Sheldon Court.
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SAALFIELD, R. S. (Student, 1912), 24 N. Prospect St., Akron, O.
SALMOWITZ, L. (Student, 1911), 201 Williams St.
SAWERS, Edward H. (Student, 1909), 491 Porter Ave., Buffalo.
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SHORT, Frank (Student, 1912), 47 Fall Creek Drive.
SHULTS, L. J. (Student, 1909), 1847 S. Sawyer Ave., Chicago, Ill.
SLAYMAKER, W. W. (Student, 1911), 107 Edgemoor Lane.
SMITH, Donald F. (Student, 1910), 411 Dryden Rd.
SOMERVILLE, W. A. S. (Student, 1910), Engrg. Dept., Diamond Div., B. F. Goodrich Co., Akron O.
SOUTH, F., Jr. (Student, 1912), 704 Columbia Bank Bldg., Pittsburgh, Pa.
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STOCKLEY, G. J. (Student, 1911), 706 E. Seneca St.
STONE, M. W. (Student, 1912), 74 Thurston Ave.
STRAUS, W. R. (Student, 1910), 1812 Eutaw Pl., Baltimore, Md.
STROHM, H. C. (Student, 1911), 123 Highland Pl.
STRONG, C. L. (Student, 1912), 219 Linden Ave.
STRUCK, H. W. (Student, 1912), 806 E. Seneca St.
STUDE, A. J. (Student, 1910), 2210 Fannin St., Houston, Tex.
STURMFELSZ, G. J. (Student, 1912), 208 Dryden Rd.
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CORNELL UNIVERSITY (Continued).

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- SWITZER, F. G. (Student, 1910), 221 Eddy St.
- TALMAN, Lyman A. (Student, 1911), 14 Buchanan St., Albany.
- TEHLE, Chas. J. (Student, 1911), 223 Eddy St.
- THOMAS, Felix (Student, 1910), 310 W. 2d St., Dayton, O.
- TITCHENER, P. F. (Student, 1912), 110 Sage Pl.
- TRUMP, C. C. (Student, 1910), Humphrey Gas Pump Co., Syracuse.
- TUVIN, J. H. (Student, 1911), 1232 50th St., Brooklyn.
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- VAN VALKENBURGH, H. B. (Student, 1912), 108 Chestnut St., East Orange, N. J.
- VOSE, C. R. (Student, 1912), 315 Elmwood Ave.
- WALLACE, Frank R. (Student, 1911), The Belgravia, 18th and Chestnut Sts., Philadelphia, Pa.
- WALZER, Joseph (Student, 1910), 532 Willoughby Ave., Brooklyn.
- WARD, J. S. (Student, 1912), 516 Stewart Ave.
- WATROUS, Russell W. (Student, 1910), 558 Ashland Ave., St. Paul, Minn.
- WATSON, Hubert L. (Student, 1910), 111 University St., West Lafayette, Ind.
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- WEISS, H. A. (Student, 1911), 118 Cook St.
- WESLEY, Chas. F. (Student, 1909), Box 148, 1421 Arch St., Philadelphia, Pa.
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- WHEDBEE, Edgar (Student, 1909), 56 Court St., Portsmouth, Va.
- WHEELER, H. T. (Student, 1911), 74 Hastings W., Vancouver, B. C., Canada.
- WHITED, E. W. (Student, 1911), 106 Highland Pl.
- WHITTY, J. J. (Student, 1909), 429 W. Buffalo St.
- WICK, L. T. (Student, 1911), 133 Lincoln Ave., Youngstown, O.
- WING, R. W. (Student, 1911), 100 Robie St., Buffalo.
- WING, S. R. (Student, 1909), 208 Dryden Rd.
- WINSHIP, R. (Student, 1910), 1103 E. Jefferson St., Bloomington, Ill.
- WIPPERMAN, F. B. (Student, 1912), 710 Thurston Ave.
- WOOD, O. A. (Student, 1912), 108 Catherine St.
- WOODS, Arthur P. (Student, 1909), Turtle Creek, Pa.
- WRIGHT, Stanley (Student, 1911), 89 Fenimore St., Brooklyn.
- WURTS, T. C. (Student, 1911), 217 West Ave.
- YOAKUM, F. E., Jr. (Student, 1909), 140 E. Ave. 59, Los Angeles, Cal.

CORNELL UNIVERSITY (Continued).

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ZINK, G. W. (Student, 1910), Mittineague, Mass.
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LEHIGH UNIVERSITY**South Bethlehem, Pa.**

- BAILEY, James (Student, 1912), 183 E. 1st St., Corning, N. Y.
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COLE, Ben. E. (Student, 1912), 34 Market St., Bethlehem.
COOK, E. W. (Student, 1912), 120 E. Wallace Ave., New Castle, Lawrence Co.
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FOWLER, Horace S. (Student, 1912), 349 W. 2d St., Elyria, O.
MART, L. T. (Student, 1912), 21 E. 4th St.
PARKER, R. V. (Student, 1912), Taylor Hall.
REITER, J. L. (Student, 1912), 918 N. 5th St., Allentown.
SCHULZ, C. A. (Student, 1911), Lehigh Univ.
SENCENBACH, Charles F. (Student, 1912), Bath.
SHEPPARD, James H. (Student, 1912), 326 Wyandotte St.
TREXLER, E. W. (Student, 1912), 1115 Walnut St., Allentown.
WILLIAMS, Harold J. (Student, 1911), 3210 Harvard St., Chicago, Ill.

LELAND STANFORD JR. UNIVERSITY**Stanford University, Cal.**

- BLEE, H. H. (Student, 1909), 311 Orange Ave., Santa Ana.
BUBB, J. B. (Student, 1911), 475 Melville Ave., Palo Alto.
BUDGE, Alex. G. (Student, 1911).
CAMPBELL, C. P. (Student, 1911).
FINNEY, W. R. (Student, 1911).
HOSTETTLER, B. L. (Student, 1912), 340 W. 8th St., Erie, Pa.
HOUGHTON, H. S. (Student, 1912), Leland Stanford Jr. Univ.
KEEFER, C. T. (Student, 1912).
MESTON, Archibald F. (Student, 1912), 511 Jeanette St., Wilkinsburg, Pa.
MURAKAMI, Y. (Student, 1911), care of K. Ishimanu, 2072 Bush St., San Francisco.
PECK, E. L. (Student, 1912).
REYNOLDS, J. L. (Student, 1911), Mary Mine, Nevada.
SANBORN, A. M. (Student, 1911).
SCHOLEFIELD, C. W. (Student, 1911), Hollister.
SHATTUCK, C. H. (Student, 1911).
WINTERS, V. W. (Student, 1911).

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Boston, Mass.

- ALLEN, D. P. (Student, 1910), 4623 Penn St., Frankford, Pa.
 ALLEN, V. W. (Student, 1911), 7 Fallon St.
 BARKER, F. R. (Student, 1912), 20 Cumberland St.
 BARTEL, P. W. (Student, 1911), 34 Bank St., Waltham.
 BOYD, E. M. (Student, 1912), 11 Gramplan Way, Dorchester.
 BROWN, A. Laurence (Student, 1912), 275 Newbury St.
 BROWNEE, Robt. B. (Student, 1910), 38 St. Botolph St.
 BURLEIGH, Wm. S. (Student, 1910), 12 Buck St., Newburyport.
 BURRELL, E. M. (Student, 1912), 7 Fallon St.
 CARTWRIGHT, Kenneth (Student, 1912), 24 Maple St., New Haven, Conn.
 CHAMBERLIN, Olin V. (Student, 1911), Dolphin Jute Mill, Paterson, N. J.
 CHATFIELD, Charles H. (Student, 1912), 509 Willow St., Waterbury, Conn.
 COGAN, P. V. (Student, 1912), 139 P St., South Boston.
 CUSTER, L. L. (Student, 1911), 18 Haverland St.
 DASSO, David (Student, 1911), Apartado 1171, Lima, Peru, S. A.
 DAVIS, A. R. (Student, 1911), 9 Butler St., Dorchester.
 DeWITT, E. W. (Student, 1912), Brattleboro, Vt.
 DREW, W. N. (Student, 1911), 311 E. Hollywood Blvd., Hollywood, Cal.
 ESTES, G. H. (Student, 1910), 18 Laurel Ave., Auburn, Me.
 FARWELL, J. B. (Student, 1912), 59 W. Central St., Natick.
 FERRY, Ralph M. (Student, 1910), 501 Sixth Ave., New Kensington, Pa.
 FISHER, T. C. (Student, 1911), 13 Spring St., Melrose Highlands.
 FISK, E. M. (Student, 1912), 142 St. Botolph St.
 FOX, R. H. (Student, 1911), 54 Oak St., Hartford, Conn.
 FRAZIER, D. N. (Student, 1912), Lynn Gas & Elec. Co., 90 Exchange St., Lynn.
 HALL, Leigh S. (Student, 1912), 225 Newbury St.
 HUNTING, David M. (Student, 1911), 26 Mason St., Salem.
 KENNEY, A. W. (Student, 1911), 12 Taft St., Dorchester.
 KERR, C. P. (Student, 1911), University Club, Altoona, Pa.
 KERR, E. (Student, 1912), 30 Newbury St.
 LANNING, J. G. (Student, 1912), 46 Lindsey St., Dorchester.
 LAVENAS, Albert (Student, 1911), 146 W. Newton St.
 LEWIS, M. (Student, 1912), 2 Greenough Pl., Jamaica Plain.
 LOEB, A. M. (Student, 1912), 276 Newbury St.
 MacPHERSON, R. G. (Student, 1910), 1495 Baldwin St., Waterbury, Conn.
 MACKENZIE, Morrel (Student, 1910), 218 Walker St., Saylesville, R. I.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY (Continued).

- MAXIM, M. S. (Student, 1912), 59 Boston St., Somerville.
NOYES, J. A. (Student, 1911), Sullivan Mchy. Co., Claremont,
N. H.
PERRY, R. H. (Student, 1912), 111 Porter St.
RHODES, George H. (Student, 1911), 430 Woodland Ave.,
Akron, O.
ROBINSON, K. C. (Student, 1912), 250 Belgrade Ave., Roslin-
dale.
RUSSELL, J. Gorden (Student, 1912), 12 Bodwell St., Dorchester.
SEATON, Roy A. (Student, 1911), K. S. A. C., Manhattan, Kan.
SHAW, H. G. (Student, 1912), 111 E. Water St., Rockland.
STRAHLMAN, O. E. (Student, 1912), 16 Westland Ave.
SUZUKI, Ewazo (Student, 1912), Kobe, Japan.
TAYLOR, P. H. (Student, 1912), 225 Newbury St.
WADE, N. S. (Student, 1911), 122 St. Botolph St.
WATERBURY, B. H. (Student, 1912), 132 St. Botolph St.
WILLIAMS, F. B. (Student, 1911), 19 Rockview St., Jamaica
Plain.
YOUNG, J. V. (Student, 1912), 250 Newbury St.

OHIO STATE UNIVERSITY**Columbus, O.**

- ASSEL, Walter J. (Student, 1911), 272 Arlington St., Youngs-
town.
BROWN, A. I. (Student, 1912), 92 Chittenden Ave.
BURRELL, Gene (Student, 1911), 31 E. 18th Ave.
BUTLER, W. G. (Student, 1912), 143 E. Frambes Ave.
COCHRAN, R. E. (Student, 1911), 83 W. Lane Ave.
EHRlich, P. H. (Student, 1911), 218 N. 7th St., Barberton.
FOSTER, O. F. (Student, 1911), 397 N. Monroe Ave.
FRANCE, L. E. (Student, 1911), 1737 W. Adams St., Los An-
geles, Cal.
HATFIELD, G. D. (Student, 1911), Tonnaleuka Club, Wilmer-
ding, Pa.
HOPKINS, A. L. (Student, 1911), 1418 E. 112th St., Cleveland.
KRAUSS, G. F. (Student, 1911), 57 Parkwood Ave.
LAMBERT, W. O. (Student, 1911), 105 W. Lane Ave.
LANG, H. T. (Student, 1912), 207 N. Clover St., Fremont.
McCLELLAN, C. C. (Student, 1911), 17 E. 16th Ave.
MICKLE, F. A. (Student, 1911), 1535 Summit St.
OVERTURF, Lewis (Student, 1911), Westerville.
PAPE, L. Robert (Student, 1911), 437 N. 22d St., East St. Louis,
Ill.
SCHALLER, H. W. (Student, 1912), 103 W. 9th Ave.
SCHMIDT, V. P. (Student, 1911), 313 S. High St.

OHIO STATE UNIVERSITY (Continued).

- STEWART, J. P. (Student, 1912), present address unknown.
 STIEHL, C. E. (Student, 1911), 414 W. Center St., Marion.
 STUMP, James L. (Student, 1912), R. 62, Frazeyburg.
 SUAREZ, R. (Student, 1911), 55 E. 11th Ave.
 SWARR, S. F. (Student, 1911), 421 Hampton Pl., Wilkinsburg, Pa.
 TOM, J. E. (Student, 1911), 68 E. 11th Ave.
 TONKIN, Ellsworth (Student, 1912), 178 W. Woodruff Ave.
 TYKE, J. C. (Student, 1912), 29 W. 9th Ave.

PENNSYLVANIA STATE COLLEGE

State College, Pa.

- BAILEY, Raymond N. (Student, 1910), Muncy.
 BINDER, Chas. G. (Student, 1912), 97 Hobart St., Rochester, N. Y.
 DAHL, C. E. (Student, 1910), Box 96, Suffern, N. Y.
 DETCHON, Ben. C. (Student, 1911), 904 Pine St., Philadelphia.
 DeTURK, J. A. (Student, 1912), 51 Washington St., Phillipsburg, N. J.
 DUNNING, F. H. (Student, 1912), 214 Ninth St., Honesdale.
 ELSTON, S. B. (Student, 1910), 104 E. Park Pl., Corry.
 FREED, Ralph A. (Student, 1910), 628 Lakewood Ave., Youngstown, O.
 GEIBEL, J. F. (Student, 1910), 375 E. Main St., Bradford.
 HOFFMAN, F. R. (Student, 1912), 124 S. Main St., Muncy.
 JACOBS, Guy W. (Student, 1910), 373 W. Philadelphia St., York.
 KANN, Wm. L. (Student, 1910), Canadian Sirocco Co., 607 Canadian Express Bldg., Montreal, Que., Canada.
 KINNEY, James A. (Student, 1912), 46 N. 17th St., Harrisburg.
 LEINBACH, W. C. (Student, 1912), 832 Penn Ave., Wilkinsburg.
 McCONNELL, T. C. (Student, 1910), 179 Marcy Ave., Brooklyn, N. Y.
 MINICH, Don C. (Student, 1910), Y. M. C. A., Mt. Vernon, O.
 RAHN, Robert M. (Student, 1910), 732 W. York Ave., York.
 ROBINSON, C. A. (Student, 1911), Huntingdon Valley.
 ROGERS, H. S. (Student, 1910), 3444 Bouquet St., Oakland, Pittsburgh.
 WAGNER, C. W. (Student, 1910), 2522 Broad Ave., Altoona.
 WILLIAMS, A. S. (Student, 1911), P. O. Box 16, Eccles, West Va.
 WILLIAMS, Nezza N. (Student, 1910), 1421 Market St., Harrisburg.
 ZIEME, Harry (Student, 1912), 503 Holmes St., Wilkinsburg.

POLYTECHNIC INSTITUTE OF BROOKLYN**Brooklyn, N. Y.**

- BRENDLIN, Wm. F. (Student, 1909), Ft. 57th St., N. R., New York.
- BROWN, Russell G. (Student, 1909), 71 Murray St., New York.
- ENNIS, Roy C. (Student, 1911), 542 Broadway, Paterson, N. J.
- FREER, W. G. (Student, 1912), 320 Broadway, New York.
- HELWIG, Alfred (Student, 1910), 7001 Tenth Ave.
- HEWLETT, V. W. (Student, 1909), Woodmere, L. I.
- KERINS, J. S. (Student, 1910), 993 Summit Ave., New York.
- KESSLER, Raines (Student, 1912), 129 Herkimer St.
- KOPF, Chas. J. (Student, 1911), Warren Webster & Co., 71 Murray St., New York.
- LEVINSKY, Abram (Student, 1912), 54 E. 109th St., New York.
- PALMER, A. (Student, 1909), 853 Jefferson Ave.
- PRIESTER, Henry (Student, 1909), 21 Crescent Pl.
- RICHARDSON, F. J. (Student, 1912), 363 Seventh St.
- ROBINSON, J. A. (Student, 1910), 112 Central Ave., Newark, N. J.
- THOMPSON, Wm. H. (Student, 1909), 53 N. 13th St., Newark, N. J.
- TYLER, Hazen G. (Student, 1912), 102 Macon St.
- WICHUM, Victor (Student, 1910), 241 Covert St.

PURDUE UNIVERSITY**Lafayette, Ind.**

- ANGST, W. J. (Student, 1912), 413 Salisbury St., West Lafayette.
- GREEN, J. B. (Student, 1910), Sellersburg.
- HANLEY, Wm. A. (Student, 1910), care of Eli Lilly & Co., Indianapolis.
- HOELOCKER, Robert B. (Student, 1910), 1508 State St., LaPorte.
- HUEBOTTER, H. A. (Student, 1912), 2110 Main St., Davenport, Ia.
- KEENAN, Geo. W. (Student, 1912), 123 Andrews Pl., West Lafayette.
- KIMMEL, A. W. (Student, 1912), 311 Waldron St., West Lafayette.
- LEDERER, H. W. (Student, 1912), 222 Marstetter St., West Lafayette.
- LEE, Clifford (Student, 1911), 23d and Glison Sts., Portland, Ore.
- LUHN, C. W. (Student, 1910), 4614 Simpson Ave., Cincinnati, O.
- MERCER, L. V. (Student, 1910), 245 N. Sandusky St., Tiffin, O.
- MILLS, James L. (Student, 1911), 1326 Greenwood Ave., Wilmette, Ill.
- MINTURN, H. A. (Student, 1912), Box 94, West Lafayette.

PURDUE UNIVERSITY (Continued).

- OWENS, Robt. H. (Student, 1912), Y. M. C. A., Dayton, O.
 PRICE, Geo. W. (Student, 1912), 823 S. State Ave., Indianapolis.
 ROMIG, A. S. (Student, 1912), 322 University St., West Lafayette.
 SCHMIEDEKNECHT, V. E. (Student, 1910), 1824 W. Jefferson St., Louisville, Ky.
 SCHNITZ, H. A. (Student, 1910), 407 Burlington Ave., Logansport.
 SHELTON, W. A. (Student, 1912), 454 Vine St., Akron, O.
 SPROULL, H. E. (Student, 1911), 722 Title Guaranty Bldg., St. Louis, Mo.
 THOMPSON, L. (Student, 1912), Bureau of Education, Manila, P. I.
 THOMPSON, P. C. (Student, 1912), 471 Broadway, Cambridge, Mass.
 WELCH, M. R. (Student, 1912), 219 Wiggins St., West Lafayette.
 WILBERDING, M. X. (Student, 1912), 311 Waldron St., West Lafayette.
 WILTSIE, C. C. (Student, 1912), 123 Andrews Pl., West Lafayette.

RENSSELAER POLYTECHNIC INSTITUTE

Troy, N. Y.

- AMSFIELD, J. (Student, 1912), 2302 12th St.
 ARDILLA, R. (Student, 1910), 726 Federal St.
 BAILEY, H. A. (Student, 1911), R. P. I. Dormitory.
 CONWAY, J. W. (Student, 1910), 403 N. 5th Ave., Mechanicsville.
 DENNISON, L. A. (Student, 1912), 102 Second St.
 DODGE, R. V., Jr. (Student, 1910), 199 Eighth St.
 FORSTER, Linn H. (Student, 1911), 15th St. and Ave. B.
 FOWLER, D. L. (Student, 1912), R. P. I. Dormitory.
 FOX, Raymond F. (Student, 1911), 15th St. and Ave. B.
 GROSS, E. D. (Student, 1911), 102 Second St.
 HERSCHELL, R. L. (Student, 1910), Delta Tau Delta House, Peoples Ave. and 11th St.
 HOAR, J. C. (Student, 1911), 21 St. Marys Ave.
 HOFFMAN, P. J. (Student, 1912), 24 Third Ave., Albany.
 HOUSTON, L. W. (Student, 1911), 102 Second St.
 KNEASS, E. (Student, 1911), 102 Second St.
 LIEMENS, F. W. (Student, 1911), Peoples Ave. and 11th St.
 MacKENZIE, G. E. (Student, 1910), Delta Tau Delta House, Peoples Ave. and 11th St.
 MANIER, R. L. (Student, 1912), Y. M. C. A.
 MARTINEZ, J. C. (Student, 1910), 1911 Seventh Ave.
 MOORE, A. E. (Student, 1910), 67 Clark St., Glen Ridge, N. J.

RENSSELAER POLYTECHNIC INSTITUTE (Continued).

- PADSON, A. (Student, 1912), 1512 Jacob St.
 PARTHESIUS, H. J. (Student, 1910), 152 Third St.
 POPP, H. E. (Student, 1910), 105 Delaware Ave., Albany.
 RALLI, V. P. (Student, 1910), 189 Second St.
 SHEARER, W. H. (Student, 1910), 55 Third St.
 SMALL, W. D. (Student, 1910), 55 Third St.
 SWAIN, Donald B. (Student, 1911), 29 Park Ave.
 VAN DENBURGH, G. (Student, 1911), 38 Sheridan Ave.
 WAY, William F. (Student, 1910), 98 Livingston Ave., Albany.
 WEAVER, H. (Student, 1910), Deerfield.
 WILLSON, Frank J. (Student, 1910), 187 Eighth St.
 ZIMMERMANN, Paul G. (Student, 1911), Chi Phi House.

STATE UNIVERSITY OF KENTUCKY**Lexington, Ky.**

- AMMERMAN, W. H. (Student, 1911), Millersburg.
 ARMISTEAD, William E. (Student, 1912), State Univ. of Ky.
 BARNETT, B. (Student, 1912), State Univ. of Ky.
 BEATTY, T. E. (Student, 1911), 107 Halsey St., Newark, N. J.
 CARY, James W. (Student, 1911), Canton, N. C.
 CASSIDY, Perry (Student, 1911), Genl. Delivery, Santa Fé,
 New Mex.
 CLEVELAND, M. A. (Student, 1911), 315 Loomis St., Chicago,
 Ill.
 COLBERT, Alvin H. (Student, 1912), State Univ. of Ky.
 CROSTHWAITE, J. S. (Student, 1912), State Univ. of Ky.
 CURTIS, J. J. (Student, 1911), Mech. Hall, State Univ. of Ky.
 DOWNING, V. L. (Student, 1911), Marathon Motor Wks., Nash-
 ville, Tenn.
 DUNCAN, J. R. (Student, 1911), 155 E. 3d St.
 EDELIN, J. L. (Student, 1911), 245 Rodes Ave.
 FITZPATRICK, J. J. (Student, 1911), 3111 College Ave., Beaver
 Falls, Pa.
 FORSYTH, Frank J. (Student, 1912), State Univ. of Ky.
 GAISER, J. H. (Student, 1911), 16th and St. Clair Sts., Coving-
 ton.
 GALLOWAY, H. C. (Student, 1911), Falmouth.
 GREGORY, William K. (Student, 1912), State Univ. of Ky.
 HALL, James F. (Student, 1912), State Univ. of Ky.
 HARDESTY, L. C. (Student, 1911), 343 Hulett St., Schenectady,
 N. Y.
 HASWELL, A. B. (Student, 1911), Atlanta Steel Co., Atlanta, Ga.
 HOLLAR, O. W. (Student, 1911), Route 1, Paris.
 HORINE, J. S. (Student, 1911), 239 S. Limestone St.
 HUDGINS, T. F. (Student, 1911), Mech. Hall, State Univ. of Ky.

STATE UNIVERSITY OF KENTUCKY (Continued).

- JAEGLE, W. H. (Student, 1911), 1817 Rowan St., Louisville.
 JONES, R. L. (Student, 1911), Walton.
 KARN, F. S. (Student, 1911), Am. Creosoting Co., Kansas City, Mo.
 KOHN, J. E. (Student, 1911), 730 W. Market St., Louisville.
 KORFHAGE, H. G. (Student, 1911), 330 Paige St., Schenectady, N. Y.
 KUNZMAN, John W. (Student, 1912), State Univ. of Ky.
 KUROSOWA, S. (Student, 1912), State Univ. of Ky.
 LANE, William M. (Student, 1912), State Univ. of Ky.
 LEWIS, George C. (Student, 1912), State Univ. of Ky.
 LINK, Edgar W. (Student, 1912), State Univ. of Ky.
 LOWE, J. T. (Student, 1911), Williamstown.
 LURTEY, W. A. (Student, 1911), 127 N. 3d St., Newark, N. J.
 MATTINGLY, Robert E. (Student, 1912), State Univ. of Ky.
 MEADORS, G. F. (Student, 1911), State Univ. of Ky.
 MILLIGAN, V. B. (Student, 1911), 708 S. Limestone St.
 MOORE, H. Lee (Student, 1911), 410 House Bldg., Pittsburgh, Pa.
 NEEDED, J. A. (Student, 1911), 2523 Portland Ave., Louisville.
 OSBORN, Charles H. D. (Student, 1912), State Univ. of Ky.
 PERRY, Daniel W. (Student, 1912), State Univ. of Ky.
 PHISTER, A. B. (Student, 1911), Anaconda Copper Co., Box 591, Anaconda, Mont.
 POGUE, Robert B. (Student, 1912), State Univ. of Ky.
 RAMSEY, A. T. (Student, 1911), R. D. 16, Anchorage.
 RIDD, Stanley J. (Student, 1912), State Univ. of Ky.
 RUDD, William C. (Student, 1912), State Univ. of Ky.
 SAUNDERS, S. D. (Student, 1911), Franklin.
 SHOEMAKER, H. R. (Student, 1911), Peck-Hammond Co., Cincinnati, O.
 STEVENSON, W. W. (Student, 1911), 749 Ross Ave., Wilkesburg, Pa.
 TALIAFERRO, Robert R. (Student, 1912), State Univ. of Ky.
 VOGLIOTTI, H. F. (Student, 1911), care of State Univ. of Ky.
 WATKINS, George C. (Student, 1912), State Univ. of Ky.
 WEISENBERGER, August J. (Student, 1912), State Univ. of Ky.
 WILHOITE, A. L. (Student, 1911), 327 S. Upper St.
 WILLIS, Robert L. (Student, 1912), State Univ. of Ky.

STEVENS INSTITUTE OF TECHNOLOGY

Hoboken, N. J.

- APPERT, Henry J. (Student, 1912), Allendale.
 ARONSON, Peter R. (Student, 1912), 125 Booraem Ave., Jersey City.

STEVENS INSTITUTE OF TECHNOLOGY (Continued).

- BAINBRIDGE, J. G. (Student, 1910), 412 West End Ave., New York, N. Y.
- BASSETT, Gerald L. (Student, 1912), 706 Bloomfield St.
- BATTEN, Loring W., Jr. (Student, 1912), 3 Chelsea Sq., New York, N. Y.
- BAUHAN, A. E. (Student, 1911), 173 Hutton St., Jersey City.
- BELDING, Lewis A. (Student, 1911), Singac.
- BERGER, Julius G. (Student, 1909), 18 Carlton Ave., Jersey City.
- BOGERT, John W. (Student, 1911), River Edge.
- BRAÜTIGAM, Jacob H. (Student, 1911), 360 Turrell Ave., South Orange.
- BREHMER, William (Student, 1910), Mexican Eagle Oil Co., Tampico, Mex.
- BURLING, H. S. (Student, 1910), 333 Springfield Ave., Summit.
- BYRON, Edward (Student, 1911), 34 Warner Ave., Jersey City.
- CADY, Cecil I. (Student, 1909), care of The Sanitary Water Still Co., Jamaica, N. Y.
- CARTER, John L. (Student, 1912), 75 S. Fullerton Ave., Montclair.
- CLOUSER, G. L. (Student, 1911), care of J. Strauss, 552 Dean St., Brooklyn, N. Y.
- COLLINS, John, Jr. (Student, 1912), 34 E. 15th St., Paterson.
- CRICHFIELD, Grant (Student, 1912), 3 Emory St., Jersey City.
- CROOKS, Stanley B. (Student, 1911), Box 198, Independence, Kan.
- DOMBROWSKY, Walter F. (Student, 1911), 117 Littleton Ave., Newark.
- ENTWISLE, John (Student, 1911), 22 Y. M. C. A. Bldg., Holyoke, Mass.
- FALLERIUS, Henry G. (Student, 1911), 3825 Third Ave., New York, N. Y.
- FORD, Frank E. (Student, 1912), Delta Tau Delta House, Castle Point.
- FREYGANG, Walter H. (Student, 1911), 752 Blvd. Loop, Weehawken.
- FULLERTON, George H. (Student, 1911), 507 River St.
- HESS, Russell G. (Student, 1912), 709 Billings Ave., Paulsboro.
- HORTON, Theodore A. (Student, 1911), 276 Rugby Rd., Brooklyn, N. Y.
- HOWE, H. A. (Student, 1910), 385 Charlton Ave., South Orange.
- KARR, A. D. (Student, 1911), 822 De Graw Ave., Newark.
- KEUFFEL, Carl W. (Student, 1911), Bureau of Standards, Washington, D. C.
- LANGE, Walter C. (Student, 1912), 2528 Grand Ave., New York, N. Y.
- LASKER, Harold H. C. (Student, 1910), 217 Montgomery St., Jersey City.

STEVENS INSTITUTE OF TECHNOLOGY (Continued).

- LAWRENCE, A. R. (Student, 1911), 81 Hamilton Ave., Yonkers, N. Y.
- LOUGHLIN, Raymond P. (Student, 1912), 377 Rutland Rd., Brooklyn, N. Y.
- LUPKE, Paul (Student, 1912), 771 E. State St., Trenton.
- McEVOY, Walter C. (Student, 1912), 1653 59th St., Brooklyn, N. Y.
- McLAURIN, King H. (Student, 1912), 134 N. 1st St., Duquesne, Pa.
- McQUAID, Harry W. (Student, 1912), Central Ave., Englewood.
- McQUILLEN, C. B. (Student, 1910), 69 Park Ave., Passaic.
- MacNABB, A. W. (Student, 1910), 134 S. 10th St., Newark.
- MALONE, John A. (Student, 1912), 332 W. 28th St., New York, N. Y.
- MARSHALL, William E. (Student, 1910), Grand St., Maspeth, L. I., N. Y.
- MESSNER, M. (Student, 1909), 106 W. 8th St., Bayonne.
- MEYERHERM, C. F. (Student, 1910), 833 Gates Ave., Brooklyn, N. Y.
- MILLSPAUGH, Kenneth R. (Student, 1912), Castle Stevens.
- NASH, Douglas E. (Student, 1912), 66 West St., South Norwalk, Conn.
- NICHOLS, Waldemar G. (Student, 1911), 169 Irvington Ave., South Orange.
- NOE, Harold C. (Student, 1912), 174 Prospect St., East Orange.
- NORRIS, Alfred G. (Student, 1912), 167 Summit Ave., Jersey City.
- OGDEN, Nelson (Student, 1909), New London Ship & Eng. Co., Groton, Conn.
- PARSONS, Sherwood S. (Student, 1912), 339 St. George St., Rahway.
- POLHEMUS, D. (Student, 1910), Clairton Steel Wks., Carnegie Steel Co., Clairton, Pa.
- PRANGE, Charles (Student, 1912), 328 Fourth Ave., New York, N. Y.
- PUDDINGTON, A. C., Jr. (Student, 1912), 99 Madison Ave., Madison.
- REITMAN, David (Student, 1912), 237 Newark Ave., Jersey City.
- REQUA, A. F. (Student, 1910), 1104 Elm St., Peekskill, N. Y.
- ROESEN, O. C. (Student, 1910), 558 Decatur St., Brooklyn, N. Y.
- ROESEN, Robert H. (Student, 1912), 558 Decatur St., Brooklyn, N. Y.
- ROSS, Cleland C. (Student, 1911), 316 E. 7th St., Plainfield.
- RUNYON, Howard J., Jr. (Student, 1912), 937 Rahway Rd., Rahway.
- SCHLANK, Elias (Student, 1912), 1162 Broad St., Newark.
- SCHNEIDER, L. J. (Student, 1910), 1316 Ford Bldg., Detroit, Mich.

STEVENS INSTITUTE OF TECHNOLOGY (Continued).

- SCHWARZ, Quirin J. (Student, 1911), 117 Webster Ave.
SKINNER, B. C. (Student, 1911), Dunedin, Fla.
STERN, Marcus (Student, 1912), care of S. S. W. D. M. Co.,
Prince Bay, S. I., N. Y.
STIEGLITZ, A. G. (Student, 1910), 411 West End Ave., New
York, N. Y.
STILLMAN, Thomas B., Jr. (Student, 1911), 532 River St.
STRAUSS, Jerome (Student, 1912), 552 Dean St., Brooklyn, N. Y.
STROBEL, J. Dixon (Student, 1912), 76 Milford Ave., Newark.
THOMAS, Henry W., Jr. (Student, 1912), 49 Albion St., Passaic.
VANDER VEER, John H. (Student, 1911), 147 Pacific St., Brook-
lyn, N. Y.
WANDEL, C. (Student, 1911), 878 Park Pl., Brooklyn, N. Y.
WHITALL, Roy C. (Student, 1912), Mexican Eagle Oil Co.,
Tampico, Tampo, Mex.
WHITLEY, Howard S. (Student, 1912), Leonia.
WILLENBORG, Carl J., Jr. (Student, 1912), 516 Hudson St.
YOUNG, Selah P. (Student, 1912), 24 N. Mountain Ave., Mont-
clair.

UNIVERSITY OF ARKANSAS**Fayetteville, Ark.**

- DICKINSON, J. A. (Student, 1912), care of S. A. E. Chapter
House.
WOHRA, H. D. (Student, 1912), Univ. of Ark.

UNIVERSITY OF CALIFORNIA**Berkeley, Cal.**

- BLACK, J. B. (Student, 1912), 634 El Dorado Ave., Oakland.
CLEMENT, D. L. (Student, 1912), 909 Broderick St., San Fran-
cisco.
COOLEY, R. H. (Student, 1912), 108 Hillside Ave., Oakland.
CUSTER, W. P. (Student, 1912), 2420 College Ave.
DAVIS, L. S. (Student, 1912), 2630 Bancroft Way.
HAGAR, Geo. H. (Student, 1912), 2631 College Ave.
MALATESTA, S. (Student, 1912), 1541 Euclid Ave.
NOYES, G. E. (Student, 1912), present address unknown.
PAGE, M. E. (Student, 1912), 2508 Haste St.
SANDMAN, O. E. (Student, 1912), 321 N. East St., Stockton.
SIMONSON, G. M. (Student, 1912), 1524 Alameda Ave., Alameda.
TAYLOR, E. W. (Student, 1912), 1039 W. 20th St., Los Angeles.
WATTS, E. L. (Student, 1912), 1325 Walnut St.
ZIPF, J. P. (Student, 1912), 1525 Fulton St., San Francisco.

UNIVERSITY OF CINCINNATI

Cincinnati, O.

- BINNS, Geo. W. (Student, 1910), Cincinnati Milling Mch. Co., Oakley.
- BRANSON, J. E. (Student, 1911), Wyoming.
- BREITENBACH, H. J. (Student, 1910), 28 Mulberry St.
- BRUEGGEMANN, J. G. (Student, 1910), 111 W. University Ave.
- CHALKLEY, Curtis R. (Student, 1911), 1625 Holman Ave., Covington, Ky.
- COLBURN, B. V. (Student, 1910), 2342 Victor St.
- COOK, H. B. (Student, 1910), The Brownell Co., Dayton.
- CRAGG, W. S. (Student, 1910), 732 Sturgis Ave., Hartwell.
- FREEMAN, B. J. (Student, 1910), 870 Hutchins Ave.
- GEARHART, Shirley Z. (Student, 1911), Box 78, Canton, N. C.
- GETZ, C. H. (Student, 1910), The Brownell Co., Dayton.
- GRAEF, A. P. (Student, 1912), 2911 Webster Ave., Oakley.
- HAINES, Philip G. (Student, 1910), Mechanics Inst., Rochester, N. Y.
- HARNED, Mark L. (Student, 1911), Box 442, McComb, Miss.
- HAUCK, J. R. (Student, 1912), 231 Fosdick St.
- HERRMANN, J. M. (Student, 1910), Homestead Pl.
- HEWITT, Arthur C. (Student, 1911), 4411 Ashland Ave., Norwood.
- HUMPHREYS, H. B. (Student, 1910), 236 Ofallon Ave., Bellevue, Ky.
- HURXTHAL, A. O. (Student, 1911), 127 Calhoun St.
- JAHNKE, Chas. B. (Student, 1910), 818 Church St., Beloit, Wis.
- JONES, Rufus B. (Student, 1911), 4349 Columbia Ave.
- KIHN, Wm. J. (Student, 1911), R. F. D. 5, Hamilton.
- KRAMPE, H. J. (Student, 1910), 1714 Queen City Ave.
- LYTLE, C. W. (Student, 1910), 127 Calhoun St.
- MALONE, C. J. (Student, 1910), Hotel Berkeley, Minneapolis, Minn.
- MATHEWSON, J. S. (Student, 1910), 4222 Chamber St.
- MITCHELL, M. A. (Student, 1912), 813 Locust St.
- MORROW, Lester C. (Student, 1912), Sta. R., Lockland.
- MYERS, R. P. (Student, 1912), 619 Burns Ave., Wyoming.
- OSTER, E. A. (Student, 1912), 1065 Wade St.
- OTTING, E. F. (Student, 1910), 3908 Glenway Ave.
- PEASLEE, W. (Student, 1910), 2430 Ohio Ave.
- PLUEDDEMANN, E. W. (Student, 1912), R. F. D. 1, California.
- RACE, R. M. (Student, 1912), 2319 Stratford Ave.
- RELLER, O. R. (Student, 1910), 2616 May St., Walnut Hills.
- ROBINSON, Max B. (Student, 1911), 2558 Eden Ave.
- ROWELL, J. T. (Student, 1910), 849 Hutchins Ave.

UNIVERSITY OF CINCINNATI (Continued).

- ROYER, E. B. (Student, 1910), 509 Grand Ave.
 SCHNEIDER, J. H. (Student, 1910), 225 Bosley St.
 SHARKEY, W. E. (Student, 1912), 407 Main St., Middletown.
 SNOW, Folger (Student, 1911), 4296 Ashland Ave., Norwood.
 SPEAR, W. A. (Student, 1912), 2616 May St.
 STEWART, H. M. (Student, 1910), 225 Bosley St.
 TANGEMAN, W. W. (Student, 1912), 2786 Eden Ave.
 WOOD, C. E. (Student, 1912), 634 Glenway Ave., Wyoming.
 ZUGELTER, G. E. (Student, 1910), 207 Elliott Ave., Arlington Hgts.

UNIVERSITY OF ILLINOIS**Urbana, Ill.**

- AAGAARD, A. H. (Student, 1912), 107 E. Chalmers St., Champaign.
 ARBUCKLE, G. S. (Student, 1912), 404 Daniel St., Champaign.
 BENJAMIN, M. G. (Student, 1912), 1865 S. Hamlin Ave., Chicago.
 BERGERT, H. A. (Student, 1910), Moline.
 BOYLE, Clarence, Jr. (Student, 1911), 522 Connell Bldg., Scranton, Pa.
 BUTTERS, Howard M. (Student, 1910), 322 N. Michigan Ave., Chicago.
 BUYERS, Donald E. (Student, 1911), 1006 S. 5th St., Champaign.
 CARLSON, Chas. A. (Student, 1910), 1532 11th Ave., Moline.
 CARNAHAN, O. A. (Student, 1909), 820 Douglas St., Fayetteville, Ark.
 CHESNUT, Ralph C. (Student, 1911), 521 S. Millard Ave., Chicago.
 CONNARD, A. F. (Student, 1910), 222 Cedar St., Aurora.
 CONSTANT, Herbert H. (Student, 1910), 31 Madison St., Chicopee Falls, Mass.
 COYLE, J. F. (Student, 1909), 231 L St., Dayton, O.
 CRIST, E. B. (Student, 1912), 603 E. White St., Champaign.
 DANZ, H. O. (Student, 1912), 512 E. Springfield Ave., Champaign.
 DUNSHEATH, L. M. (Student, 1909), Y. M. C. A., Pittsburg, Kan.
 DUNTON, P. R. (Student, 1911), York Mfg. Co., 710 Franklin Ave., Houston, Tex.
 DUTT, M. L. (Student, 1910), 78 Manicktola St., Calcutta, India.
 ELMENDORF, A. (Student, 1912), 405 E. Daniel St., Champaign.
 FAUST, P. A. (Student, 1911), 715 23d St., Moline.
 GOODING, Frank E. (Student, 1911), 4008 Clarendon Ave., Chicago.
 GOUGLER, J. H. (Student, 1911), Spava.
 GULLEY, L. R. (Student, 1911), 907 W. Nevada St.

UNIVERSITY OF ILLINOIS (Continued).

- HASSELQUIST, E. J. (Student, 1910), 3427 9½ Ave., Rock Island.
- HEILMAN, H. C. (Student, 1909), 440 S. 43d St., Philadelphia, Pa.
- HERRCKE, E. A. (Student, 1910), 1339 Fifth St., La Salle.
- HUNTINGTON, C. S. (Student, 1909), Onawa, Ia.
- JACOBSEN, C. H. (Student, 1910), 214 E. 52d St., Los Angeles, Cal.
- JEHLE, Ferdinand (Student, 1909), Genl. Motors Co., Detroit, Mich.
- KELL, C. N. (Student, 1911), 1610 Sixth Ave., Moline.
- KEOWN, B. L. (Student, 1909), 425 N. Walier Ave., Austin Sta., Chicago.
- KERNDT, A. H. (Student, 1912), Box 661, Salida, Colo.
- KNAUSS, D. S. (Student, 1910), 40th and Locust Sts., Philadelphia, Pa.
- KREIDLER, D. W. (Student, 1909), 1137 Third Ave., Detroit, Mich.
- KURT, J. J. (Student, 1911), 501 E. John St., Champaign.
- LEUTWILER, R. W. (Student, 1910), 840 Barry Ave., Chicago.
- LINDSTROM, A. W. (Student, 1910), 1509 Fisher Bldg., Chicago.
- MASTERS, J. H. (Student, 1912), 104 S. Romine St.
- MATTHEWS, L. M. (Student, 1911), McClure.
- MATTSON, E. N. (Student, 1911), Y. M. C. A., Champaign.
- MAURY, T. E. (Student, 1912), 206 E. John St., Champaign.
- MILES, P. K. (Student, 1911), Mech. Engrg. Dept., Rensselaer Poly. Inst., Troy, N. Y.
- MIX, Martin I. (Student, 1911), 106 N. Romine St.
- MORRILL, G. S. (Student, 1912), 412 E. Green St., Champaign.
- MOSCHEL, H. (Student, 1909), 2008 Sixth Ave., Moline.
- NICKI, F. S. (Student, 1912), La Salle Mch. & Tool Co., La Salle.
- ORDONES, B. R. (Student, 1911), 511 E. Healy St., Champaign.
- PARMELY, J. C. (Student, 1909), 128 Smith St., Kewanee.
- PFEIFFER, B. S. (Student, 1912), 405 John St., Champaign.
- PHILLEO, G. W. (Student, 1910), Arkansas Valley Smelter, Leadville, Colo.
- SCHLINK, F. J. (Student, 1910), Matthiessen & Hegeler Zinc Co., La Salle.
- SCHOESSEL, C. A. (Student, 1912), 212 E. Green St., Champaign.
- SCHUSTER, George (Student, 1909), Test Dept., A. T. & S. F. R. R., Topeka, Kan.
- SMITH, Howard S. (Student, 1912), 10,533 Wilbur Ave., Cleveland, O.
- SMITH, Lloyd G. (Student, 1911), 706 S. 2d St., Champaign.
- SPERRY, F. E. (Student, 1909), 404 Kane St., Aurora.
- SPONSLER, J. M. (Student, 1909), 109 John St., Champaign.

UNIVERSITY OF ILLINOIS (Continued).

- STAHL, A. C. (Student, 1912), 404 E. Daniel St., Champaign.
STUEBING, Albert F. (Student, 1910), 1122 Mt. Vernon Ave.,
Columbus, O.
THOMPSON, Herbert P. (Student, 1911), Plainfield.
WESTLUND, A. F. (Student, 1909), 1952 S. Springfield Ave.,
Chicago.
WEYDELL, A. F. (Student, 1912), 412 W. High St.

UNIVERSITY OF KANSAS**Lawrence, Kan.**

- ANGEVINE, Leland C. (Student, 1912), 1521 N. H. St.
BARTLETT, R. L. (Student, 1912), 2201 Ave. I, Ensley, Ala.
BROEKER, Fritz G. (Student, 1911), L. E. Rodgers Engrg. Co.,
Rm. 917, 30 N. La Salle St., Chicago, Ill.
BROWNE, Lawrence L. (Student, 1910), 544 Oakland Ave., Kan-
sas City.
CARSON, Earl (Student, 1912), 1345 Vermont St.
FORNEY, R. H. (Student, 1911), 640 Hamilton St., Schenectady,
N. Y.
HILFORD, V. H. (Student, 1911), Route 1, Richmond.
HOWARD, J. D. (Student, 1912), 1117 Vermont St.
KLEIHEGE, D. B. (Student, 1912), 1201 New Jersey St.
KNERR, L. E. (Student, 1911), 1208 Mississippi St.
MALCOMSON, W. J. (Student, 1912), 1230 Oread St.
MARTINSON, C. G. (Student, 1910), 301 N. Dodge St., Wichita.
NEWBY, H. L. (Student, 1912), 1501 Rhode Island St.
NIGH, Claude H. (Student, 1912), 1149 La. St.
NOFSINGER, L. E. (Student, 1912), 1344 Kentucky St.
PLANK, W. Jay (Student, 1909), 1231 Oread Ave.
REYMOND, Paul (Student, 1911), 1341 Ohio St.
RUSH, Earl S. (Student, 1911), 1012 Kentucky St.
TANGEMAN, W. H. (Student, 1912), 1017 Indiana St.

UNIVERSITY OF MAINE**Orono, Me.**

- ADAMS, A. A. (Student, 1912), Main St.
AYER, E. (Student, 1912), A. T. O. House.
BIGELOW, E. H. (Student, 1912), Kappa Sigma House.
CANNON, A. H. (Student, 1912).
FAULKNER, H. C. (Student, 1912), Theta Epsilon House.
DAVIS, O. H. (Student, 1912), Kappa Sigma House.
JENNISON, E. W. (Student, 1912), Kappa Sigma House.
FIELD, L. A. (Student, 1912), S. A. E. House.
FOWLER, E. E. (Student, 1912), S. A. E. House.

UNIVERSITY OF MAINE (Continued).

- HAYES, A. B. (Student, 1912), S. A. E. House.
 JACKSON, R. O. (Student, 1912), Stillwater.
 JUNKINS, J. A. (Student, 1912), Delta Kappa House.
 KENT, B. C. (Student, 1912), Stillwater.
 LEKBERG, Prof. (Student, 1912).
 MERRIAM, Frank E. (Student, 1910), 815 South Ave., Wilkinsburg, Pa.
 PHILBROOK, P. E. (Student, 1912), A. T. O. House.
 TIPPING, C. H. (Student, 1912), A. T. O. House.

UNIVERSITY OF MISSOURI

Columbia, Mo.

- BURG, F. A. (Student, 1911), 807 Rollins St.
 DUNBAR, Irwin (Student, 1911), 715 Lyons St.
 EDWARDS, A. C. (Student, 1911), 700 Washington St., St. Charles.
 FRAUENS, Frank H. (Student, 1911), Lowry Hall.
 GARDNER, W. A. (Student, 1912), 1008 Conley Ave.
 GEORGE, Ralph D. (Student, 1911), 2419 Myrtle Ave., Kansas City.
 HANEY, J. W. (Student, 1911), Benton Hall.
 HEBBARD, C. B. (Student, 1912), Lowry Hall.
 HECKER, A. J. (Student, 1911), 2622 Louisiana Ave., St. Louis.
 HEILEMAN, F. A. (Student, 1912), Benton Hall.
 HELMREICH, L. W. (Student, 1911), Rankin Sch., Cook Ave., St. Louis.
 HEPTONSTALL, A. E. (Student, 1911), Needles, Cal.
 HUGHES, A. A. (Student, 1911), 605 Sanford Pl.
 JAMES, R. M. (Student, 1911), 719 Gentry Pl.
 KEMP, F. I. (Student, 1911), Acacia House.
 KLEIN, Geo. F. (Student, 1912), 604 Conley Ave.
 LEVY, S. (Student, 1912), 1108 Locust St.
 LOTZ, R. M. (Student, 1912), Lowry Hall.
 McCLAUGHRY, R. W. (Student, 1912), Y. M. C. A. Bldg.
 MITCHELL, Glenn D. (Student, 1910), 417 Lincoln St., Johnstown, Pa.
 MORGAN, E. Earle (Student, 1912), 501 Conley Ave.
 MUELLER, H. (Student, 1911), 708 Missouri Ave.
 MURRILL, R. T. (Student, 1911), 8 College Ave.
 OLSON, C. A. (Student, 1911), 7919 Harvard Ave., Chicago, Ill.
 PIERCE, A. E. (Student, 1911), 603 Sanford Pl.
 POUND, J. H. (Student, 1911), 719 Gentry Pl.
 ROSE, J. M. (Student, 1912), 610 Range Line.
 RUNGE, Robert (Student, 1912), 1008 Conley Ave.

UNIVERSITY OF MISSOURI (Continued).

- SHARP, H. N. (Student, 1910), 311 Waugh St.
 SOSEY, Donald H. (Student, 1912), 606 College Ave.
 STEED, Arthur (Student, 1910), 511 Jeannette St., Wilkinsburg, Pa.
 SWILLUM, J. E. (Student, 1912), 1108 Walnut Ave.
 TALBOT, C. P. (Student, 1912), 206 Waugh St.
 TANNER, P. Arthur (Student, 1911), 617 Fish Ave., Moberly.
 THOMAS, Stephen (Student, 1910), 4112 Morgan St., St. Louis.
 THOMPSON, H. E. (Student, 1911), 27 Y. M. C. A.
 VINCIL, Peake (Student, 1912), 605 Sanford St.
 WEAVER, H. E. (Student, 1910), 208 S. 10th St.
 WESTCOTT, A. L. (Student, 1910), Galena-Signal Oil Co., 400 Forsyth Bldg., Atlanta, Ga.

UNIVERSITY OF NEBRASKA**Lincoln, Neb.**

- BERGER, E. B. (Student, 1912), 711 Finance Bldg., Kansas City, Mo.
 BIXBY, W. H. (Student, 1912), care of City Electrician, 924 Q St.
 BURKE, J. P. (Student, 1910), 1519 Jefferson Ave., La Porte, Ind.
 DALE, E. E. (Student, 1912), Rushville.
 DITTERLINE, E. (Student, 1910), 1108 Cedar St., Milwaukee, Wis.
 FOSTER, R. J. (Student, 1912), 1829 J St.
 FRANCIS, J. A. (Student, 1910), Silver Crown, Wyo.
 ROSENCRANTS, F. H. (Student, 1910), Ore. Agri. College, Corvallis, Ore.
 SOMERS, F. A. (Student, 1912), Box 1182, Sta. A.
 WIGGINS, E. R. (Student, 1912), 529 N. 16th St.

UNIVERSITY OF WISCONSIN**Madison, Wis.**

- BARNUM, C. T. (Student, 1911), Pioneer Pole & Shaft Co., 607 Washington Ave., Cairo, Ill.
 LANGWILL, John S. (Student, 1910), Rockford Drilling Mch. Co., Rockford, Ill.
 MOYER, Wm. D. (Student, 1912), 926 W. Johnson St.
 MUELLER, Benjamin H. (Student, 1910), 655 Jefferson St., Milwaukee.
 PROCHAZKA, H. C. (Student, 1910), Genl. Delivery, Milwaukee.
 ROBERTS, C. (Student, 1911), Y. M. C. A., Kankakee, Ill.
 SCHLECK, Walter H. (Student, 1910), 214 N. Murray St.
 SPOOR, I. H. (Student, 1910), Sparta, Kent Co., Mich.
 WEGNER, Arnold A. (Student, 1910), 717 Mineral St., Milwaukee.

WASHINGTON UNIVERSITY

St. Louis, Mo.

- BLAKEMORE, Thomas L. (Student, 1911), 7627 Hiawatha Ave.
 CONRADES, P. E. (Student, 1911), 2013 St. Louis Ave.
 DAUGHERTY, Eugene (Student, 1911), 2221 Geraldine Ave.
 DODSON, Roland (Student, 1912), Tower Dormitory, Washington Univ.
 FALLEK, Isadore (Student, 1911), 720 S. 4th St.
 GLASGOW, F. Ewing (Student, 1911), 4371 Washington Ave.
 KOHLMAYER, Fred A. (Student, 1911), 5227 Kensington Ave.
 MCCARTHY, Lester B. (Student, 1911), 419 Rebecca St., Wilkinsburg, Pa.
 MOVERICK, Louis A. (Student, 1911), Washington Univ.
 ROSBOROUGH, J. G., Jr. (Student, 1911), 7300 Marietta Ave., Maplewood.
 ROSSI, F. (Student, 1911), Kirkwood.
 SCHLEIFFARTH, A. (Student, 1912), 2804 Eads Ave.
 SCHWEIER, Arthur (Student, 1911), Stone & Webster Engrg. Corp., Keokuk, Ia.
 SIEGERIST, Walter (Student, 1912), Liggett Hall, Washington Univ.
 SOUTHERLAND, David B. (Student, 1911), Washington Univ.
 WINSTON, B. F. (Student, 1912), 5134 Maple Ave.

YALE UNIVERSITY

New Haven, Conn.

- BACON, J. B. F. (Student, 1912), 395 Temple St.
 BENJAMIN, Harrie L. (Student, 1912), 341 Crown St.
 BOOTH, Charles E. (Student, 1911), 415 George St.
 CAMP, Wm. E. (Student, 1912), 105 Vanderbilt Sheff.
 CONKLIN, B. A. (Student, 1912), 119 College St.
 COONEY, L. S. (Student, 1911), Greenwich.
 CORBETT, Melvin C. (Student, 1912), 206 Orchard St.
 COVELL, O. D. (Student, 1912), 133 College St.
 CUMMINS, Cloyd (Student, 1910), 3 N. Wendell Ave., Schenectady, N. Y.
 CURTIS, Alfred S. (Student, 1912), 160 Vanderbilt Sheff.
 DuBOSQUE, C. (Student, 1910), Hotel La Tourette, Bayonne, N. J.
 DuBOSQUE, Steele (Student, 1912), 60 Stanley Rd., South Orange, N. J.
 FERGUSON, Donald B. (Student, 1912), St. Anthony Hall.
 FISHER, R. F. (Student, 1911), 518 N. Main St., Jamestown, N. Y.
 FOSDICK, A. H. (Student, 1912), 105 Vanderbilt Sheff.
 GILBERT, H. H. (Student, 1912), 66 Kensington St.

YALE UNIVERSITY (Continued).

- GRAFF, W. M. (Student, 1910), 310 York St.
HARDY, D. W. (Student, 1912), 119 College St.
HART, Howard P. (Student, 1912), 119 College St.
JOHNSTON, D. A. (Student, 1910), 376 W. Main St., New Britain.
JONES, Franklin M. (Student, 1910), Noroton.
KNABLE, G. E. (Student, 1910), 124 Prospect St.
KNOWLTON, C. H. (Student, 1911), 63 Lake Pl.
LEES, K. F. (Student, 1912), 290 Howard Ave.
LYMAN, F. C. (Student, 1912), 700 Oneida Blk., Minneapolis, Minn.
MANNY, W. Roy (Student, 1910), Alpha Delta Phi House, Ithaca, N. Y.
O'BRIEN, Cyrus (Student, 1912), 119 College St.
PLIMPTON, Chester H. (Student, 1912), St. Anthony Hall.
RIGGS, George (Student, 1912), Byers Hall.
ROBERTSON, H. B. (Student, 1912), 103 Vanderbilt Sheff.
ROBINSON, D. M., Jr. (Student, 1912), 53 Prospect St.
ROWLAND, Eustis T. (Student, 1910), 68 Union Ave., Schenectady, N. Y.
SELIGMAN, Walter (Student, 1912), 180 Vanderbilt Sheff.
SMITH, A. L. (Student, 1912), 114 High St.
SNOWDON, C. N. (Student, 1912), St. Anthony Hall.
STEPHENSON, F. L. (Student, 1912), St. Anthony Hall.
STEWART, J. H. (Student, 1912), St. Anthony Hall.
TULLOSS, Joseph C. (Student, 1911), 657 Taylor Hall.
WATERS, E. O. (Student, 1912), 90 Whalley Ave.
WOOLNER, Seymour A. (Student, 1911), 805 Yale Sta.

STUDENT BRANCHES

SUMMARY OF AFFILIATES

Armour Institute of Technology.....	13
Columbia University	37
Cornell University	205
Lehigh University	14
Leland Stanford Jr. University.....	16
Massachusetts Institute of Technology.....	51
Ohio State University.....	27
Pennsylvania State College.....	23
Polytechnic Institute of Brooklyn.....	17
Purdue University	25
Rensselaer Polytechnic Institute.....	32
State University of Kentucky.....	57
Stevens Institute of Technology.....	76
University of Arkansas.....	2
University of California.....	14
University of Cincinnati.....	46
University of Illinois.....	62
University of Kansas.....	19
University of Maine.....	17
University of Missouri.....	39
University of Nebraska.....	10
University of Wisconsin.....	9
Washington University	16
Yale University	40
Total	867

THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

MISCELLANEOUS INFORMATION CHARTER, CONSTITUTION BY-LAWS AND RULES

DECEASED HONORARY MEMBERS

Name	Date of Election	Died
Horatio Allen	1880	1889
Daniel K. Clark.....	November 1882	1896
Rudolph Clausius	November 1882	1888
Peter Cooper	November 1882	1883
O. Hallauer	November 1882	1883
G. A. Hirn.....	November 1882	1890
Edward J. Reed.....	November 1882	1906
Franz Reuleaux	November 1882	1905
Henri Schneider	November 1882	1898
C. William Siemens.....	November 1882	1883
Henri Tresca	November 1882	1885
Johann Bauschinger	November 1884	1893
Frederick Bramwell	November 1884	1904
F. Grashof	November 1884	1893
Gustav Herrmann	November 1884	1907
Benjamin Baker	May 1886	1907
James Dredge	May 1886	1906
Francis A. Walker.....	May 1886	1897
John Coode	November 1889	1892
Joseph Hirsch	November 1889	1901
Chas. T. Porter.....	January 1890	1910
Henry Bessemer	June 1891	1898
Gustave Canet	December 1900	1908
Chas. H. Haswell.....	April 1905	1907
Geo. W. Melville.....	February 1910	1912

PAST OFFICERS

Alexander L. Holley, Chairman of the Meeting for Organization
of The American Society of Mechanical Engineers.....
.....Died January 29, 1882

PRESIDENTS

R. H. Thurston.....	1880-1882.....	Died October 25, 1903
E. D. Leavitt.....	1883.....	Cambridge, Mass.
John E. Sweet.....	1884.....	Syracuse, N. Y.
J. F. Holloway.....	1885.....	Died September 1, 1896
Coleman Sellers	1886.....	Died December 28, 1907
George H. Babcock.....	1887.....	Died December 16, 1893
Horace See	1888.....	Died December 14, 1909
Henry R. Towne.....	1889.....	New York, N. Y.
Oberlin Smith	1890.....	Bridgeton, N. J.
Robert W. Hunt.....	1891.....	Chicago, Ill.
Charles H. Loring.....	1892.....	Died February 5, 1907
Eckley B. Coxe.....	1892-1894.....	Died May 13, 1895
E. F. C. Davis.....	1895.....	Died August 6, 1895
Charles E. Billings.....	1895.....	Hartford, Conn.
John Fritz	1896.....	Bethlehem, Pa.
Worcester R. Warner.....	1897.....	Cleveland, O.
Charles Wallace Hunt.....	1898.....	Died March 27, 1911
George W. Melville.....	1899.....	Died March 17, 1912
Charles H. Morgan.....	1900.....	Died January 10, 1911
S. T. Wellman.....	1901.....	Cleveland, O.
Edwin Reynolds	1902.....	Died February 19, 1909
James M. Dodge.....	1903.....	Philadelphia, Pa.
Ambrose Swasey	1904.....	Cleveland, O.
John R. Freeman.....	1905.....	Providence, R. I.
F. W. Taylor.....	1906.....	Philadelphia, Pa.
F. R. Hutton.....	1907.....	New York, N. Y.
M. L. Holman.....	1908.....	St. Louis, Mo.
Jesse M. Smith.....	1909.....	New York, N. Y.
George Westinghouse	1910.....	Pittsburgh, Pa.
E. D. Meier.....	1911.....	New York, N. Y.
Alex. C. Humphreys.....	1912.....	New York, N. Y.

VICE-PRESIDENTS

Henry Rossiter Worthington.....	April-December, 1880
Coleman Sellers	April, 1880—November, 1881
Eckley B. Coxe.....	April, 1880—November, 1881
Quincy A. Gillmore.....	April, 1880—December, 1880
Wm. H. Shock.....	April, 1880—November, 1882
Alexander L. Holley.....	April, 1880—January, 1882
Francis A. Pratt.....	December, 1880—November, 1881
Theo. N. Ely.....	1881—November, 1882
Washington Jones	1881—November, 1882
Wm. P. Trowbridge.....	1881—November, 1883
E. D. Leavitt.....	1881—December, 1882

NOTE.—According to the Constitution, Article C 27, the five Past Presidents who last held the office shall be members of the Council, with all the rights, privileges and duties of the other members of the Council.

Chas. E. Emery	1881-1883
S. B. Whiting	1882-1883
John Fritz	1882-1884
Henry Morton	1882-1884
Wm. Metcalf	1882-1884
A. B. Couch	1883-1885
W. R. Eckart	1883-1885
J. V. Merrick	1883-1885
Chas. W. Copeland	1884-1886
Coleman Sellers	1884-1885
Olin Landreth	1885-1886
Henry R. Towne	1885-1886
Allan Stirling	1885-1887
Horace See	1885-1887
Chas. H. Loring	1885-1887
Jos. Morgan, Jr.	1886-1888
Chas. T. Porter	1886-1888
Horace S. Smith	1886-1888
W. S. G. Baker	1887-1889
H. G. Morris	1887-1889
C. J. H. Woodbury	1887-1889
Thos. J. Borden	1888-1890
William Kent	1888-1890
Charles B. Richards	1888-1890
De Volson Wood	1889-1891
Joel Sharp	1889-1891
Geo. W. Weeks	1889-1891
Stephen W. Baldwin	1890-1892
Alex. Gordon	1890-1892
Jno. F. Parkhurst	1890-1892
George I. Alden	1891-1893
El. F. C. Davis	1891-1893
Irving M. Scott	1891-1893
Charles Wallace Hunt	1892-1894
Edwin Reynolds	1892-1894
Thos. R. Pickering	1892-1894
Percival Roberts, Jr.	1893-1895
H. J. Small	1893-1895
Charles E. Billings	1893-1895
Frank H. Ball	1894-1896
M. L. Holman	1894-1896
Jesse M. Smith	1894-1896
Francis W. Dean	1895-1897
Charles H. Manning	1895-1897
George W. Melville	1895-1897
Edwin S. Cramp	1896-1898
W. F. Durfee	1896-1898
S. T. Wellman	1896-1898
Charles M. Jarvis	1897-1899
Walter S. Russell	1897-1899
John C. Kafer	1897-1899
E. D. Meier	1898-1900
George R. Stetson	1898-1900
B. H. Warren	1898-1900
Jesse M. Smith	1899-1901

Stevenson Taylor	1899-1901
David Townsend	1899-1901
James M. Dodge.....	1900-1902
Ambrose Swasey	1900-1902
Arthur M. Waitt.....	1900-1902
M. E. Cooley.....	1901-1903
Wilfred Lewis	1901-1903
M. P. Higgins.....	1901-1903
James Christie	1902-1904
F. H. Daniels.....	1902-1904
John R. Freeman.....	1902-1904
D. S. Jacobus.....	1903-1905
William J. Keep.....	1903-1905
M. L. Holman.....	1903-1905
S. M. Vauclain.....	1904-1906
H. H. Westinghouse.....	1904-1906
Fred. W. Taylor.....	1904-1905
Geo. H. Barrus.....	1905-1906
Walter M. McFarland.....	1905-1907
Robt. C. McKinney.....	1905-1907
Edward N. Trump.....	1905-1907
Philetus W. Gates.....	1906-1908
John W. Lieb, Jr.....	1906-1908
Alex Dow	1906-1908
L. P. Breckenridge.....	1907-1909
Fred J. Miller.....	1907-1909
Arthur West	1907-1909
Geo. M. Bond.....	1908-1910
R. C. Carpenter.....	1908-1910
F. M. Whyte.....	1908-1910
Chas. Whiting Baker.....	1909-1911
W. F. M. Goss.....	1909-1911
E. D. Meier.....	1909-1910
Alex. C. Humphreys.....	1910-1911
Geo. M. Brill.....	1910-1912
Edwin M. Herr.....	1910-1912
Henry H. Vaughan.....	1910-1912

MANAGERS

Wm. P. Trowbridge.....	April, 1880—November, 1881
Theo. N. Ely.....	April, 1880—November, 1881
J. C. Hoadley.....	April, 1880—November, 1881
Washington Jones	April, 1880—November, 1881
Wm. B. Cogswell.....	April, 1880—November, 1882
Chas. B. Richards.....	April, 1880—November, 1882
S. B. Whiting.....	April, 1880—November, 1882
E. D. Leavitt, Jr.....	April, 1880—November, 1882
J. F. Holloway.....	November, 1880—November, 1883
Geo. W. Fisher.....	November, 1880—November, 1883
Allan Stirling	November, 1881—November, 1884
Geo. H. Babcock.....	1881—November, 1884
S. W. Robinson.....	1881—November, 1884
John E. Sweet.....	1882-1883
Robt. W. Hunt.....	1882-1885
Chas. T. Porter.....	1882-1885

C. J. H. Woodbury.....	1882-1885
W. F. Durfee.....	1883-1886
Oberlin Smith.....	1883-1886
C. C. Worthington.....	1883-1886
Wm. Lee Church.....	1884-1887
Wm. Hewitt.....	1884-1887
Chas. H. Morgan.....	1884-1887
Hamilton A. Hill.....	1885-1888
William Kent.....	1885-1888
Saml. T. Wellman.....	1885-1888
John T. Hawkins.....	1886-1889
Fredk. G. Coggin.....	1886-1889
Thos. R. Morgan, Sr.....	1886-1889
Stephen W. Baldwin.....	1887-1890
Fredk. Grinnell.....	1887-1890
Morris Sellers.....	1887-1890
Frank H. Ball.....	1888-1891
Geo. M. Bond.....	1888-1891
Wm. Forsyth.....	1888-1891
Jas. E. Denton.....	1889-1892
Carleton W. Nason.....	1889-1892
H. H. Westinghouse.....	1889-1892
Andrew Fletcher.....	1890-1893
Worcester R. Warner.....	1890-1893
Coleman Sellers, Jr.....	1890-1893
Jas. M. Dodge.....	1891-1894
Robt. Forsyth.....	1891-1894
Jesse M. Smith.....	1891-1894
John Thomson.....	1892-1895
Charles W. Pusey.....	1892-1895
Charles H. Manning.....	1892-1895
John B. Herreshoff.....	1893-1896
Lebbeus B. Miller.....	1893-1896
Walter S. Russel.....	1893-1896
Charles A. Bauer.....	1894-1897
Arthur C. Walworth.....	1894-1897
John C. Kafer.....	1894-1897
Geo. W. Dickie.....	1895-1898
E. D. Meier.....	1895-1898
Norman C. Stiles.....	1895-1898
A. Wells Robinson.....	1896-1899
H. S. Haines.....	1896-1899
G. C. Henning.....	1896-1899
J. B. Stanwood.....	1897-1900
H. H. Suplee.....	1897-1900
Geo. Richmond.....	1897-1900
Edgar C. Felton.....	1898-1901
A. M. Goodale.....	1898-1901
Richard H. Soule.....	1898-1901
Francis H. Boyer.....	1899-1902
John A. Brashear.....	1899-1902
Alfred H. Raynal.....	1899-1902
W. F. M. Goss.....	1900-1903
D. S. Jacobus.....	1900-1903
De Courey May.....	1900-1903

Charles H. Corbett.....	1901-1904
H. A. Gillis.....	1901-1904
R. S. Moore.....	1901-1904
Robt. C. McKinney.....	1902-1905
Newell Sanders.....	1902-1905
S. S. Webber.....	1902-1905
John W. Lieb, Jr.....	1903-1906
Asa M. Mattice.....	1903-1906
Geo. I. Rockwood.....	1903-1906
George M. Brill.....	1904-1907
Fred J. Miller.....	1904-1907
Richard H. Rice.....	1904-1907
Walter Laidlaw.....	1905-1908
Fred M. Prescott.....	1905-1908
Frank G. Tallman.....	1905-1908
G. M. Basford.....	1906-1909
Andrew J. Caldwell.....	1906-1909
Andrew L. Riker.....	1906-1909
Wm. L. Abbott.....	1907-1910
Alex. C. Humphreys.....	1907-1910
Henry G. Stott.....	1907-1910
H. L. Gantt.....	1908-1911
I. E. Moulthrop.....	1908-1911
W. J. Sando.....	1908-1911
J. Sellers Bancroft.....	1909-1911
James Hartness.....	1909-1912
H. G. Reist.....	1909-1912
Henry G. Stott.....	1911-1912

TREASURERS

Lycurgus B. Moore.....	April, 1880—December, 1881
Chas. W. Copeland.....	December, 1881—November, 1884

SECRETARIES

Saml. S. Webber, Jr.....	Secretary, organization meeting, 1880
Lycurgus B. Moore.....	Acting Secretary, April—November, 1880
Thos. Whiteside Rae.....	November, 1880—March, 1883
F. R. Hutton.....	1883-1906

CALENDAR OF ANNUAL AND SPRING MEETINGS

Place	Date	No.	Class of Meeting	Members Present
New York, N. Y....	Feb. 16, 1880.....		Preliminary ..	
Hoboken, N. J.....	April 7, 1880.....		Organization...	
New York, N. Y....	Nov. 4 to 5, 1880....	1	1st Annual....	84
Hartford, Conn....	May 4 to 6, 1881.....	2	Regular	36
Altoona, Pa.....	Aug. 10 to 12, 1881....	3	Regular	37
New York, N. Y....	Nov. 3 to 4, 1881.....	4	2d Annual....	65
Philadelphia, Pa....	April 19 to 21, 1882...	5	Regular	96
New York, N. Y....	Nov. 1 to 3, 1882.....	6	3d Annual....	58
Cleveland, O.....	June 12 to 14, 1883...	7	Regular	77
New York, N. Y....	Oct. 31 to Nov. 3, 1883	8	4th Annual....	131
Pittsburgh, Pa....	May 20 to 23, 1884....	9	Regular	93
New York, N. Y....	Nov. 5 to 7, 1884.....	10	5th Annual....	129
Atlantic City, N. J.	May 26 to 29, 1885....	11	Regular	71
Boston, Mass.....	Nov. 10 to 13, 1885....	12	6th Annual....	130
Chicago, Ill.....	May 25 to 28, 1886....	13	Regular	121
New York, N. Y....	Nov. 30 to Dec. 3, 1886	14	7th Annual....	192
Washington, D. C..	May 31 to June 3, 1887	15	Regular	117
Philadelphia, Pa....	Nov. 28 to Dec. 1, 1887	16	8th Annual....	216
Nashville, Tenn....	May 8 to 12, 1888.....	17	Regular	58
Scranton, Pa.....	Oct. 15 to 18, 1888....	18	9th Annual....	124
Erie, Pa.....	May 14 to 17, 1889....	19	Regular	83
New York, N. Y....	Nov. 18 to 22, 1889....	20	10th Annual...	249
Cincinnati, O.....	May 13 to 16, 1890....	21	Regular	164
Richmond, Va.....	Nov. 11 to 14, 1890....	22	11th Annual...	126
Providence, R. I...	June 16 to 19, 1891....	23	Regular	279
New York, N. Y....	Nov. 16 to 19, 1891....	24	12th Annual...	298
San Francisco, Cal.	May 16 to 19, 1892....	25	Regular	54
New York, N. Y....	Nov. 29 to Dec. 2, 1892	26	13th Annual...	294
Chicago, Ill.....	July 31 to Aug. 5, 1893	27	Regular	283
New York, N. Y....	Dec. 4 to 8, 1893.....	28	14th Annual...	268
Montreal, Canada..	June 5 to 8, 1894.....	29	Regular	133
New York, N. Y....	Dec. 3 to 7, 1894.....	30	15th Annual...	383
Detroit, Mich.....	June 25 to 28, 1895....	31	Regular	132
New York, N. Y....	Dec. 2 to 6, 1895.....	32	16th Annual...	346
St. Louis, Mo.....	May 19 to 22, 1896....	33	Regular	92
New York, N. Y....	Dec. 1 to 4, 1896.....	34	17th Annual...	391
Hartford, Conn....	May 25 to 28, 1897....	35	Regular	205
New York, N. Y....	Nov. 30 to Dec. 3, 1897	36	18th Annual...	378
Niagara Falls, N. Y.	May 31 to June 3, 1898	37	Regular	137
New York, N. Y....	Nov. 29 to Dec. 2, 1898	38	19th Annual...	351
Washington D. C..	May 9 to 12, 1899....	39	Regular	274
New York, N. Y....	Dec. 5 to 8, 1899.....	40	20th Annual...	469
Cincinnati, O.....	May 15 to 18, 1900....	41	Regular	144
New York, N. Y....	Dec. 4 to 7, 1900.....	42	21st Annual...	467
Milwaukee, Wis....	May 28 to 31, 1901....	43	Regular	156
New York, N. Y....	Dec. 3 to 6, 1901.....	44	22d Annual...	519
Boston, Mass.....	May 27 to 30, 1902....	45	Regular	375
New York, N. Y....	Dec. 2 to 5, 1902.....	46	23d Annual...	474
Saratoga, N. Y....	June 23 to 26, 1903....	47	Regular	315
New York, N. Y....	Dec. 1 to 4, 1903.....	48	24th Annual...	538
Chicago, Ill.....	May 31 to June 4, 1904	49	Regular	350
New York, N. Y....	Dec. 6 to 9, 1904.....	50	25th Annual...	542
Scranton, Pa.....	June 6 to 9, 1905.....	51	Regular	121
New York, N. Y....	Dec. 5 to 8, 1905.....	52	26th Annual...	784
Chattanooga, Tenn.	May 1 to 4, 1906.....	53	Regular	212
New York, N. Y....	Dec. 4 to 7, 1906.....	54	27th Annual...	735
Indianapolis, Ind..	May 28 to 31, 1907....	55	Regular	296
New York, N. Y....	Dec. 3 to 6, 1907.....	56	28th Annual...	699
Detroit, Mich.....	June 23 to 26, 1908...	57	Regular	269
New York, N. Y....	Dec. 1 to 4, 1908.....	58	29th Annual...	738
Washington, D. C..	May 4 to 7, 1909.....	59	Regular	276
New York, N. Y....	Dec. 7 to 10, 1909....	60	30th Annual...	628
Atlantic City, N. J.	May 31 to June 3, 1910	61	Regular	135
New York, N. Y....	Dec. 6 to 9, 1910.....	62	31st Annual...	633
Pittsburgh, Pa....	May 30 to June 2, 1911	63	Regular	305
New York, N. Y....	Dec. 5 to 8, 1911.....	64	32d Annual...	687
Cleveland, O.....	May 28 to 31, 1912....	65	Regular	221
New York, N. Y....	Dec. 3 to 6, 1912.....	66	33d Annual....	562

SERIAL PUBLICATIONS IN THE JOINT LIBRARY OF THE ENGINEERING SOCIETIES

THE AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS
THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
THE AMERICAN INSTITUTE OF MINING ENGINEERS

Académie des Sciences, Paris. Comptes rendus. W. Vol. 1-date. Par., 1835-date. Supplement. Vol. 1. Par., 1856. Supplement. Vol. 2. Par., 1861. Tables générale. Vol. 1-31. 1835-1850. Par., 1853. Tables générale. Vol. 32-61. 1851-1865. Par., 1870. Tables générale. Vol. 62-91. 1866-1880. Par., 1880.

— Histoire de l'Académie avec les mémoires de mathématique et de physique. 1699-1778. Amsterdam—Par., 1734-1782. Years 1699-1703 are ed. 2.

— Histoire de l'Académie avec les mémoires de physique. Vol. 1-3. 1666-1698. Par., 1777.

— Histoire de l'Académie, contenant un abrégé historique de chaque Science, avec une liste générale des Mémoires de mathématiques et de physique jusqu'à l'année 1751, inclusivement. Amsterdam, 1760.

— Histoire du renouvellement de l'Académie et les éloges historiques de tous les Académiciens morts depuis ce renouvellement, avec un discours préliminaire sur l'utilité des mathématiques et de la physique. 1699. Par., 1708.

— Mémoires de l'Académie. Vol. 1-date. 1816-date. Par., 1818-date. Continuation of Mémoires de l'Institut National de Sciences et Arts. Sciences mathématiques et physiques. Tables générales des travaux contenus dans les Mémoires. Ser. 1. Vol. 1-14. 1795-1815. Ser. 2, Vol. 1-40. 1816-1878. Par., 1881.

— Mémoires de l'Institut National de Sciences et Arts. Sciences, mathématiques et physiques. Vol. 1-14. 1795-1815. Par., 1798-1818. Continued as Mémoires de l'Académie.

— Mémoires de physique. 1705-1707, 1722, 1724. Par., 1777-1779.

— Mémoires par divers savans. Sciences mathématiques et physiques. Ser. 1, Vol. 1-2. 1806-1811; Ser. 2, Vol. 1-32. 1827-1902. Par., 1806-1811, 1827-1902. Tables générales des travaux contenus dans les Mémoires. Ser. 1, Vol. 1-2. 1806-1811; Ser. 2, Vol. 1-25. 1827-1877. Par., 1881. (Bound in Vol. 25.)

— Philosophical history and memoirs of the Royal Academy of Sciences at Paris; or, An abridgment of all the papers, 1699-1720. Translated and abridged by J. Martyn and E. Chambers. Vol. 1-5. Lond., 1742.

- Suite des mémoires de mathématique et de physique. 1699, 1703, 1709, 1723-1757, 1764-1765, 1776-1778. Amsterdam-Par., 1734, 1738, 1709, 1777, 1732-1733, 1735-1744, 1746-1748, 1750, 1755-1758, 1761-1763, 1765-1767, 1773-1782.
- Table générale des matières contenues dans l'Histoire et Mémoires de l'Académie. 6v. 1699-1770. Amsterdam-Par., 1741-1779. Vol. 1-3. 1699-1734. Amsterdam, 1741. Vol. 4. 1735-1751. Amsterdam, 1760. Vol. 5. 1751-1760. Paris, 1779. Vol. 6. 1761-1770. Paris, 1779.
- Traité physique et historique de l'aurore boreale. 1731. Amsterdam, 1735.
- Académie Impériale des Sciences de St. Pétersbourg. Bul. (in Russian.) Bi-M. Ser. 6. 1907, nos. 1-7; 1908, no. 11. St. Petersburg, 1907-1908.
- Académie Royale des Sciences, Paris. *See* Académie des Sciences, Paris.
- Academy of Natural Sciences of Philadelphia. Proc. Irreg. 1871-date. Phil., 1871-date.
- Académie Royale de Belgique. Bulletin de la Classe de Sciences. Irreg. 1899-1902, 1905-date. Bruxelles, 1899-1902, 1905-date.
- Acetylen in Wissenschaft und Industrie. Bi-M. Vol. 13-date. Halle, 1910-date.
- Acetylene. M. Vol. 6-date. Lond., 1909-date.
- A E G Journal. M. Vol. 1-date. Ber., July 1911-date. (Continuation of A E G Zeitung.)
- A E G Zeitung. M. Vol. 11, no. 10-Vol. 13, no. 12. Ber., April 1909-June 1911. (Continued as A E G Journal.)
- Aëronautical Journal. Q. Vol. 13-date. Lond., 1909-date.
- Aeronautics. M. Vol. 4-date. N. Y., 1909-date.
- Aeronautics. M. Pub. by American Engineer and Railroad Journal. Vol. 1, no. 1-12. October 1893-September 1894 bound separately. N. Y., 1893-1894. (Ceased publication in October 1895. During existence was a supplementary subject in American Engineer and Railroad Journal and from October 1894-October 1895 numbers are bound with that periodical.)
- L'Aerophile. Bi-M. Vol. 1-7; Vol. 8, nos. 7, 9, 11; Vol. 9, nos. 1-4, 6, 8-12; Vol. 10, nos. 1-11; Vol. 11; Vol. 12, nos. 2-3, 5-12; Vol. 13; Vol. 14, nos. 1-6, 9-12; Vol. 15, nos. 2-4, 6-8; Vol. 16-date. Par., 1893-date.
- Age of Steel. W. Vol. 85-92, no. 23. St. Louis, 1899-1902. (In December 1902 combined with Iron and Steel and formed Iron and Machinery World.)
- Alabama Industrial and Scientific Society. Proc. 1891-1899. Tuscaloosa, Ala., 1891-1900.
- Albany Institute. Trans. Vol. 1; Vol. 2, no. 1; Vol. 5. Albany, 1830, 1833, 1867.
- Allgemeine Automobile Zeitung. W. Vol. 10, pt. 2-date. Ber., April 1909-date.
- Allgemeine Oesterreichische Chemiker- und Techniker-Zeitung. Organ des Verein der Bohrtechniker. S-M. Vol. 17-18. Wien, 1910-1911. Supplement of Allgemeine Oesterreichische Chemiker- und Techniker-Zeitung. Zentral- Organ für Petroleum-Industrie. (In January 1912 title changed to Zeitschrift des International Verein der Bohringenieur und Bohrtechniker.)

- Allgemeine Oesterreichische Chemiker- und Techniker-Zeitung.** Zentral-Organ für Petroleum-Industrie. S-M. Vol. 28-date. Wien, 1910-date. Supplement Organ des Verein der Bohr-techniker.
- Aluminum World.** M. Vol. 1-8. N. Y., 1894-1902. (Combined with Brass Founder and Finisher and Electro-platers Review in January 1903 and formed Metal Industry. Vol. 3, no. 4-Vol. 8, no. 3, title reads Aluminum World and Brass and Bronze Industries. Vol. 8, no. 4-15, title reads Aluminum World and Brass and Copper Industries.)
- American Academy of Arts and Sciences.** Proc. Irreg. Vol. 1-2, 8, 34, no. 22; Vol. 35, nos. 11, 25; Vol. 36, nos. 26-27; Vol. 37, nos. 17, 21-23; Vol. 43, nos. 1-3, 5-12, 15-22; Vol. 44-date. Bost., 1848-1852, 1873, 1899-1902, 1907-date.
- American Association for the Advancement of Science.** Proc. Y. 1-date. 1848-date. Phil., 1849-date.
- American Blacksmith.** M. Vol. 2, 4, 6-date. Buffalo, N. Y., 1902, 1904, 1906-date.
- American Brass Founders' Association.** Trans. Y. Vol. 1-date. n. p., 1908-date.
- American Brewing Institute.** See American Society of Brewing Technology.
- American Ceramic Society.** Trans. Y. Vol. 1-date. 1899-date. Columbus, O., 1900-date.
- American Chemical Journal.** Q. Vol. 1-7; Vol. 15, no. 1; Vol. 16, no. 2; Vol. 17, no. 9; Vol. 21-22; Vol. 25, nos. 5-6; Vol. 26, nos. 1-5. Baltimore, 1879-1886, 1893, 1895, 1899, 1901. General Index. Vol. 1-10. 1879-1888. Baltimore, 1890.
- American Chemical Society.** Chemical abstracts. M. Vol. 1-date. Easton, Pa., 1907-date.
- Journal. M. Vol. 1-3, 4, nos. 5-12; Vol. 5-date. N. Y.-Easton, Pa., 1879-date. Vol. 1-15 published in New York. General index to the Journal. Vol. 1-20. 1879-1898 and to the Proceedings. 1877-1879. Easton, Pa., 1902.
- Proceedings. Q. Vol. 1-2. Year 1904-1907. N. Y., 1876-1878, 1904-1907. Continued in the Journal of the American Chemical Society. General index to the Journal. Vol. 1-20. 1879-1898 and to the Proceedings 1877-1879. Easton, Pa., 1902.
- Twenty-fifth Anniversary Number. 1901. Easton, Pa., 1902.
- American Chemist.** M. Vol. 1; Vol. 2, no. 1-6, 8-12; Vol. 3-4; Vol. 7, nos. 1-8, 10. N. Y., 1870-1872, 1872-1874, 1876-1877.
- American Electric and Automobile Patents Monthly.** M. Vol. 1, no. 1-6. Wash., 1902.
- American Electric Railway Accountants' Association.** See American Electric Railway Association.
- American Electric Railway Association.** Proc. Y. 1911-date. N. Y., 1911-date. (Continuation of American Street and Interurban Railway Association.) Contains also Proceedings of the American Electric Railway Accountants' Association, American Electric Railway Claim Agents' Association, American Electric Railway Transportation and Traffic Association.
- American Electric Railway Claim Agents' Association.** See American Electric Railway Association.

- American Electric Railway Transportation and Traffic Association. *See* American Electric Railway Association.
- American Electrical Society. *Jour. Irreg.* Vol. 1-2. Chic., 1875-1878.
- American Electrician. *M.* Vol. 8-17. 1896-1905. N. Y., 1896-1905. (Vol. 1-7 title reads Electrical Industries. In January 1906 consolidated with Electrical World.)
- American Electrochemical Society. *Trans. Irreg.* Vol. 1-date. Phil.-South Bethlehem, Pa., 1902-date. Table of contents. Vol. 1-18. 1902-1910. South Bethlehem, Pa., n. d.
- American Electro-Therapeutic Association. *Trans. Y.* Vol. 14, 16-17. 1904, 1906-1907. N. Y., 1905-1908.
- American Engineer. (Chic.) *M.* Vol. 2-21. Chic., 1881-1891. (Ceased publication in 1892.)
- American Engineer and Railroad Journal. *M.* Vol. 67-date. 1893-date. N. Y., 1893-date. (Vol. 70-72, 1896-1898, title reads American Engineer, Car Builder and Railroad Journal. National Car and Locomotive Builder consolidated with American Engineer in June 1896.)
- American Forestry. *M.* Vol. 8-date. Wash., 1902-date. (Vol. 8-14, no. 8, title reads Forestry and Irrigation. Vol. 14, no. 9-Vol. 15, title reads Conservation.)
- American Foundrymen's Association. *Jour. M.* Vol. 9-12. N. Y., 1900-1904.
- *Transactions. Y.* 1904-date. n. p., 1904-date.
- American Gas Institute. *Proc. Y.* Vol. 1-date. 1906-date. N. Y., 1907-date. (Formed by the union of American Gas Light Association, Ohio Gas Light Association and Western Gas Association.)
- American Gas Light Association. *Proc. Y.* Vol. 1-22. N. Y., 1873-1905. (In 1906 united with Ohio Gas Light Association and Western Gas Association to form American Gas Institute.)
- American Gas Light Journal. *W.* Vol. 12, 14-67, 69-date. N. Y., 1870, 1871-1897, 1898-date.
- American Geographical and Statistical Society. *See* American Geographical Society.
- American Geographical Society. *Jour. M.* Vol. 1, nos. 1-3, 8; Vol. 2, nos. 1-2; Vol. 3, 6-8, 10-32; Vol. 33, no. 4; Vol. 35, no. 3; Vol. 38, no. 7-9, 11; Vol. 39, no. 7-8; Vol. 40, no. 6-7. N. Y., 1859-1870, 1872-1876, 1878-1900, 1901, 1903, 1906-1908. (Vol. 1-2 name of Society was American Geographical and Statistical Society.)
- American Geologist. *M.* Vol. 1-36. Minneapolis, Minn., 1888-1905. General index. Vol. 1-36. 1888-1905. (From 1906 continued as Economic Geology.)
- American Institute of Architects. *Proceedings of the annual convention. Y.* 31st-37th, 39th-date. 1897-1903, 1905-date. Providence, 1897-date.
- *Quarterly Bulletin. Q.* Vol. 1, nos. 1-4; Vol. 2, nos. 1-3; Vol. 3-date. Wash., 1900-date.
- American Institute of Chemical Engineers. *Trans. Y.* Vol. 1-date. N. Y., 1908-date.

- American Institute of Electrical Engineers. Proc. M. Vol. 1-date. October 1887-date. N. Y., 1887-date. (From 1887-1904 both monthly and yearly publications known as Transactions. Publications including contents of Transactions and index of authors. Vol. 1-29. 1884-1910. N. Y., n. d.)
- Transactions. S-A. Vol. 1-date. May 1884-date. N. Y., 1884-date. (From 1887-1904 both monthly and yearly publications known as Transactions. Publications including contents of Transactions and index of authors. Vol. 1-29. 1884-1910. N. Y., n. d.)
- American Institute of Mining Engineers. Bul. M. No. 1-date. 1905-date. N. Y., 1905-date. (Nos. 1-24 known as Bi-monthly Bulletin.)
- Transactions. Y. Vol. 1-date. 1871-date. N. Y., 1873-date. Index. Vol. 1-5. 1871-1877 in Vol. 5. Easton, Pa., 1877. Contents and index. Vol. 1-20. 1871-1892. 2 pts. in 1v. N. Y., 1888. Contents and index. Vol. 1-25. 1888-1897. N. Y., 1888. General alphabetical and analytical index. Vol. 1-35. 1871-1904. N. Y., 1907. Index. Vol. 16-20. 1887-1891 in Vol. 20. N. Y., 1892. Contents and index. Vol. 1-30. 4 pts. in 1v. 1888-1902. N. Y., n. d. General alphabetical and analytical index. Vol. 36-40. 1905-1909. N. Y., 1910.
- American Institute of the City of New York. Annual report. Y. 1865-1866. Albany, 1866.
- American Iron and Steel Association. Annual statistical report. Y. 1873-date. Phil., 1873-date.
- Bulletin. W. Vol. 14-date. Phil., 1880-date.
- American Journal of Mathematics. Q. Vol. 2-6, 8-date. 1879-1884, 1886-date. Baltimore, 1879-date.
- American Journal of Mining. See Engineering and Mining Journal.
- American Journal of Railway Appliances. Bi-M. Vol. 1-7, 11. N. Y., 1883-1887, 1891. (Continued as Railway Machinery.)
- American Journal of Science. M. Vol. 1-date. New Haven, Conn., 1818-date. Vol. 50. Ser. 1. General index. Vol. 1-49. New Haven, 1847. Vol. 10. Ser. 2. General index. Vol. 1-10. New Haven, 1850. Vol. 20. Ser. 2. General index. Vol. 11-20. New Haven, 1855. Vol. 30. Ser. 2. General index. Vol. 21-30. New Haven, 1860. Vol. 40. Ser. 2. General index. Vol. 31-40. New Haven, 1865. Vol. 50. Ser. 2. General index. Vol. 41-50. New Haven, 1870. Vol. 10. Ser. 3. General index. Vol. 1-10. New Haven, 1875. Vol. 20. Ser. 3. General index. Vol. 11-20. New Haven, 1880. Ser. 3. General index. Vol. 21-30. New Haven, 1886. Ser. 3. General index. Vol. 31-40. Ser. 3. General index. Vol. 41-50. Ser. 4. General index. Vol. 1-10. New Haven, 1900. Ser. 4. General index. Vol. 11-20. New Haven, 1906. Ser. 4. General index. Vol. 21-30. New Haven, 1911. (From 1820-1879 title reads American Journal of Science and Arts.)
- American Machinist. W. Vol. 3-date. N. Y., 1880-date.
- American Magazine of Useful and Entertaining Knowledge. Vol. 2. 1835. Bost., 1839.
- American Manufacturer and Iron World. W. Vol. 12-68, no. 25; Vol. 69, no. 2-26; Vol. 70, nos. 1-15, 17-26; Vol. 71-78. 1876-June 1906. Pittsburg, 1876-1906. (Incorporated as Industrial World in June 1906.)

- American Marine Engineer. M. Vol. 2, no. 3-12; Vol. 3-date. March 1907-date. Chic., 1907-date.
- American Miller. M. Vol. 14-date. Chic., 1886-date.
- American Mining Congress. Report of the proceedings of the annual session. Y. 6th-date. Denver, Colo., 1903-date.
- American Museum of Natural History. Annual report. Y. No. 13-date. N. Y., 1882-date.
- Bulletin. Irreg. Vol. 1-date. N. Y., 1881-date.
- American Peat Society. Jour. Q. Vol. 1-date. April 1908-date. Toledo, O., 1908-date.
- American Philosophical Society. Proc. Q. Vol. 1-date. 1838-date. Phil., 1840-date. Early proceedings. 1744-1838. Compiled by one of the secretaries from manuscript minutes of its meetings. Phil., 1884. Memorial Volume 1. Phil., 1900. General index. Vol. 1-50. 1838-1911. Phil., 1912.
- Transactions. Irreg. Vol. 1-6; New series, Vol. 1-15. Phil., 1786-1804, 1818-1881.
- American Physical Society. Bul. Q. Vol. 1-2. Ithaca, N. Y., 1899-1902.
- American Polytechnic Journal. M. Vol. 1-4. N. Y., 1853-1854.
- American Public Works Association. Convention. 2. Atlanta, Ga., 1907.
- American Railway Association. Proc. Vol. 1-date. N. Y., 1886-date. The volume of 1886-1893 contains an appendix of the Proceedings of the General Time Convention, 1872-1885, and of the Southern Railway Time Convention, 1877-1885. In 1886 the Southern Railway Time Convention united with the General Time Convention and in 1891 the convention became the American Railway Association.
- Statistical Bulletin. Nos. 52, 53A, 54, 55, 55A-B, 56, 57, 57A, 59A, 60, 61A, 63, 68, 69, 79, 80, 80A, 81, 81A, 82, 83, 84, 84A. N. Y., 1909-date.
- American Railway Bridge and Building Association. Proceedings of the annual convention. Y. 14th-18th, 20th-date. Concord, N. H., 1904-1908, 1910-date. (14th-17th reads Association of Railway Superintendents of Bridges and Buildings.)
- American Railway Engineering and Maintenance-of-way Association. Proceedings of the annual convention. Y. Vol. 1-date. Chic., 1900-date.
- American Railway Master Mechanics' Association. Report of the proceedings of the annual convention. Y. Vol. 1-date. 1868-date. v. p., 1868-date. Index. Vol. 1-33. 1868-1900. Chic., 1901. (1868-1874, 1876-1880 title reads Annual Report.)
- American Railway, Mechanical and Electrical Association. Report of the annual convention. Y. 2-3. Detroit, Mich., 1904-1905. (From 1906 continued as American Street and Inter-urban Railway Association.)
- American Railway Review. W. Vol. 1-2. N. Y., 1859-1860.
- American Society for Testing Materials. Proceedings of the annual meeting. Y. Vol. 1-date. 1899-date. Phil., 1899-date. Yearbook. 1910-date. Phil., 1910-date.
- American Society of Agricultural Engineers. Trans. Y. Vol. 1-date. Ames, Iowa, 1907-date.
- American Society of Brewing Technology. Jour. M. Vol. 2, no. 7; Vol. 1, no. 1, 3. September-October, December 1910.

Chic., 1910. (In October 1910 name of society was changed from American Brewing Institute to American Society of Brewing Technology.)

American Society of Civil Engineers. Proc. M. Vol. 1-date. November 1873-date. N. Y., 1876-date. Vol. 17-21 in Vol. 24, 26, 28, 32-33 of the Transactions.

— Transactions. Q. Vol. 1-date. December 1867-date. N. Y., 1872-date. Appendix to Vol. 14. 1885. Index. Vol. 1-21. 1868-1889. N. Y., 1890. Index. Vol. 1-45. 1867-1901. N. Y., 1901. Vol. 54, parts A-F, contain papers and discussions of the International Engineering Congress, St. Louis, Mo., 1904.

American Society of Heating and Ventilating Engineers. Trans. Y. Vol. 1-date. N. Y., 1895-date.

American Society of Mechanical Engineers. Jour. M. Vol. 28-date. October 1906-date. N. Y., 1906-date. (From October 1906-June 1908 title reads Proceedings. Volume number same as volume number of Transactions.)

— Transactions. Y. Vol. 1-date. N. Y., 1880-date. General index to the Transactions. Vol. 1-25. 1880-1904. N. Y., 1906.

American Society of Municipal Improvements. Proceedings of the annual convention. Y. 2d, 4th-7th, 12th-14th. v. p., 1895, 1897-1900, 1905-1907.

American Society of Naval Engineers. Jour. Q. Vol. 1, nos. 3-4; Vol. 2-date. Wash., 1899-date.

American Society of Refrigerating Engineers. Trans. Y. Vol. 1-date. N. Y., 1905-date.

American Society of Swedish Engineers. Bul. M. Vol. 3, sup. no. 1; Vol. 3, No. 7; Vol. 6, no. 1-2. Brooklyn, N. Y., 1909, 1912.

American Street and Interurban Railway Accountants' Association. *See* American Street and Interurban Railway Association.

American Street and Interurban Railway Association. Proc. Y. 1906-1910. N. Y., 1906-1910. (Formerly American Street Railway Association.) Contains also Proceedings of the American Street and Interurban Railway Engineering Association, American Street and Interurban Railway Accountants' Association, Street Railway Claim Agents' Association of America, American Street and Interurban Railway Transportation and Traffic Association. (In 1910 name of society changed to American Electric Railway Association.)

American Street and Interurban Railway Engineering Association. *See* American Street and Interurban Railway Association.

American Street and Interurban Railway Transportation and Traffic Association. *See* American Street and Interurban Railway Association.

American Street Railway Association. Report of the annual meeting. Y. 1, 3-24. 1882-1905. v. p., 1882-1905. (From 1882-1897 title reads Verbatim Report. From September 1905 continued as American Street and Interurban Railway Association.)

American Street Railway Investments. Y. Vol. 1-17. N. Y., 1894-1910. (An annual supplement to Street Railway Journal. In 1911 title changed to McGraw Electric Railway Manual.)

- American Telephone Journal. W. Vol. 2, no. 46; Vol. 3, no. 22; Vol. 4, nos. 9, 13, 19; Vol. 5-18, no. 9. 1900-1901, 1902-August 1908. N. Y., 1900-1908. (In September 1908 combined with and continued as Telephony.)
- American Water Works Association. Proc. Y. Vol. 1-date. v. p., 1881-date. (From 1883-1902 title reads Report of Proceedings.) Vol. 1-2 and 5 are reprints.
- Analyst. M. Vol. 32-date. Lond., 1907-date.
- Annalen der chemie. M. Vol. 365-date. Lpz., 1909-date. (Title reads Justus Liebig's Annalen der chemie.) Continuation of Annalen der Pharmacie. Register. Vol. 369-372 in Vol. 372. Lpz., 1909. Register. Vol. 373-376 in Vol. 376. Lpz., 1910. Register. Vol. 377-380 in Vol. 380. Lpz., 1911.
- Annalen der Elektrotechnik. S-M. Vol. 1-5. Lpz., 1906-1910.
- Annalen der Hydrographie und Maritimen Meteorologie. M. Vol. 38-date. Ber., 1910-date.
- Annalen der Physik. M. Vol. 1-62. Halle, 1799-1818. (Continuation of Journal der Physik. Continued as Annalen der Physik und der Physikalischen Chemie.)
- Annalen der Physik. M. Ser. 4. Vol. 1-date. Lpz., 1900-date. (Continuation of Annalen der Physik und Chemie.)
- Annalen der Physik. M. Beiblätter. Vol. 1-date. Lpz., 1877-date. (Vol. 1-23 title reads Beiblätter zu den Annalen der Physik und Chemie.) Namenregister. Vol. 1-15. 1877-1891. Lpz., 1893. Namenregister. Vol. 16-30. 1892-1906. Lpz., 1909. *See also* Annalen der Physik.
- Annalen der Physik und Chemie. Vol. 77-236; new series, Vol. 1-69. Lpz., 1824-1899. (Continuation of Annalen der Physik und der Physikalischen Chemie.) Vol. 45-47 contains Verhandlungen der Deutschen Physikalischen Gesellschaft. (Continued as Annalen der Physik.) Sach- und Namen-Register. Vol. 1-76. 1799-1824. Lpz., 1826. Namen- und Sach-Register. Vol. 1-120. Ergänzungsbänd. 2-4. 3 pts. in 1v. Lpz., 1845-1865. Namen-Register. Vol. 1-150. Ergänzungsband. Vol. 1-6, nebst Jubelband, und Sach-Register. Vol. 121-150, Ergänzungsband Vol. 5-6, nebst Jubelband. Lpz., 1875. Sachregister. Poggendorff'sche Folge. Vol. 1-160, Ergänzungsband. Vol. 1-8, und Jubelband. 1824-1877. Lpz., 1888. Namenregister. Vol. 151-160 (1874-1877 nebst Ergänzungsband. Vol. 7-8 der Poggendorff'schen Reihe und zu Vol. 1-50 (1877-1893) der Reihe von Wiedemann. Lpz., 1894. Sachregister. Vol. 1-50 (1877-1893). Lpz., 1897. Jubelband. Lpz., 1874. Ergänzungsband. Vol. 1-8. Lpz., 1842-1878.
- Annalen der Physik und der Physikalische Chemie. Vol. 63-76. Halle, 1819-1824. (Continuation of Annalen der Physik. Continued as Annalen der Physik und Chemie.)
- Annalen für Gewerbe und Bauwesen. S-M. Vol. 1-date. Ber., 1877-date. (Also known as Glaser's Annalen für Gewerbe und Bauwesen.) Literaturblatt. Vol. 54-59. Ber., 1904-1906.
- Annales de Chimie. *See* Annales de Chimie et de Physique.
- Annales de Chimie et de Physique. M. Vol. 1-date. Par., 1789-date. (Vol. 1-78 title reads Annales de Chimie.) Table générale. Vol. 1-30. Par., 1801. Table générale. Vol. 31-60. Par., 1807. Table générale. Vol. 67-96. Par., 1821. Table générale. Vol. 1-30. Par., 1831. Table générale. Vol. 31-60. Par., 1840. Table. Ser. 3. Vol. 1-30. Par., 1851. Table analytique des matières. Ser. 3. Vol. 31-69. 1851-1863.

- Par., 1866. Table analytique des matières. Ser. 4. 1864-1873. Par., 1874. Tables. Ser. 5. Vol. 1-30. 1874-1883. Par., 1885.
- Annales de l'Electricité. W. Vol. 1-3. Bruxelles, 1882-1884.
- Annales des Mines. M. Ser. 1, Vol. 1-date. 1795-date. Par., 1795-date. (1795-1815 title reads Journal des Mines.) Table alphabétique et analytique des matières. Ser. 1, Vol. 1-28. 1795-1810. Par., 1813. Table alphabétique et analytique des matières. Ser. 1-2, Vol. 39-59. 1816-1830. Par., 1831. Table alphabétique et analytique des matières. Ser. 3. Vol. 60-79. 1832-1841. Par., 1847. Table alphabétique et analytique des matières. Ser. 4, Vol. 80-99. 1842-1851. Par., 1852. Table alphabétique et analytique des matières. Ser. 5, Vol. 100-119. 1852-1861. Par., 1868. Table alphabétique et analytique des matières. Ser. 6, Vol. 120-139. 1862-1871. Par., 1873. Table alphabétique et analytique des matières. Ser. 7, Vol. 140-159. 1872-1881. Par., 1882. Table alphabétique et analytique des matières. Ser. 8, Vol. 160-179. 1882-1891. Par., 1893. Table alphabétique et analytique des matières. Ser. 9, Vol. 180-199. 1892-1901. Par., 1904.
- Annales des Mines, partie administrative ou recueil de lois, décrets, arrêtés et autres actes. M. Ser. 5, Vol. 1-10; Ser. 6, Vol. 1-10; Ser. 7, Vol. 1-10; Ser. 8, Vol. 1-3, 6-10; Ser. 9, Vol. 1-9; Ser. 10, Vol. 1-date. Par., 1852-date.
- Annales des Mines de Belgique. Q. Vol. 8, pt. 4; Vol. 9-date. Bruxelles, 1903-date. Tables générales. Vol. 1-10. 1896-1905. Bruxelles, 1906.
- Annales des Ponts et Chaussées. Bi-M. Mémoires et documents. Ser. 6, Vol. 17-18; Ser. 8, Vol. 31-35, 37-date. Par., 1889, 1908-date. Lois, décrets, arrêtés. Ser. 6, Vol. 9; Ser. 8, Vol. 8, pt. 2-date. Par., 1889, 1908-date. Personnel. Par., 1889.
- Annales du Conservatoire Impérial des Arts et Métiers. Y. Ser. 1, Vol. 1-10; Ser. 2, Vol. 1-10; Ser. 3, Vol. 1-4. Par., 1861-1902.
- Annales Industrielles. W. Vol. 26. (2v. of text, 1v. plates.) Par., 1894.
- Annales Télégraphiques. M. Ser. 1, 1855-1856; Ser. 2, Vol. 1-8; Ser. 3, Vol. 1-19, 21. Par., 1855-1856, 1858-1865, 1874-1892, 1894. (Publication suspended from 1866-1873 inclusive.) Table générale. 1855-1890. Par., 1891.
- Annals of Electricity, Magnetism and Chemistry. Q. Vol. 1-10. 1836-1843. Lond., 1837-1843.
- Annals of Philosophy. Vol. 1-3, 1800-1802; Vol. 1-16, 1813-1820; new series, Vol. 1-12, 1821-1826. Lond., 1801-1804, 1813-1820, 1821-1826. Vol. 1-2 are second editions. (In 1827 combined with Philosophical Magazine and Journal and formed Philosophical Magazine.)
- Année Scientifique et Industrielle. Y. Vol. 1, 19. 1857, 1875. Par., 1857, 1876.
- Annuaire par le Bureau des Longitudes. Y. 1833, 1838, 1879, 1897-date. Par., 1832, 1837, 1879, 1897-date.
- Anthracite Coal Operators' Association. M. February-April, August-December 1897; 1898-October 1901. N. Y., 1897-1901.
- Appleton's Mechanics' Magazine and Engineers' Journal. M. Vol. 1-3. 1851-1853. N. Y., 1852-1854.
- Arcana of Science and Art: or An Annual Register of Useful Inventions. Y. Vol. 10. Lond., 1837.

- Architectural Record. M. Vol. 3-4, 23-date. N. Y., 1893-1895, 1908-date.
- Architekten- und Ingenieur- Verein zu Hannover. Zeitschrift für Architektur und Ingenieurwesen. Bi-M. New series 8, Vol. 49-date. Weisbaden, 1903-date. Alphabetisches Sachregister. New series, Vol. 1-8. 1855-1862. Hannover, 1864. Sechstes alphabetisches Inhalts-verzeichnis. Vol. 38-47. 1892-1901. Weisbaden, 1904.
- Archiv für Eisenbahnwesen. Bi-M. Vol. 31-date. Ber., 1908-date.
- Archiv für Mineralogie, Geognosie, Bergbau und Hüttenkunde. Y. Vol. 1-26. Ber., 1829-1854.
- Archiv für Post und Telegraphie. S-M. Vol. 37-date. Ber., 1909-date.
- Archives des Sciences Physiques et Naturelles. M. Vol. 1-36; new series, Vol. 1-64; Ser. 3, Vol. 1-34; Ser. 4, Vol. 1-date. Par., 1846-1857, 1858-1878, 1878-1895, 1896-date. (Preceded by Bibliothèque Britannique and also Bibliothèque Universelle des Sciences.)
- Archives of the Roentgen Ray. M. Vol. 6-16. August 1901-May 1910. Lond., 1901-1910.
- Armour Engineer. S-M. Vol. 3-date. Chic., 1911-date.
- Artizan, a Monthly Record of the Progress of Civil and Mechanical Engineering. M. Vol. 1-29. Lond., 1843-1871. (Vol. 1-3 title reads Artizan, a Monthly Journal of the Operative Arts.)
- Asociación de Ingenieros Industriales de Barcelona. Revista tecnológico industrial. Vol. 14. Barcelona, 1891.
- Asociacion de Ingenieros y Arquitectos de Mexico. Anales. Irreg. Vol. 1-7, 9-date. Mex., 1886-date.
- Association des Ingénieurs Electriciens. Bul. Ser. 2, Vol. 11; Ser. 3, Vol. 1-date. Par., 1899-date.
- Association des Ingénieurs sortis de l'Ecole de Liège. Annuaire. Ser. 4, Vol. 1, no. 6; Vol. 2-3. Liège, 1882-1884.
- Bulletin. New series Vol. 1, nos. 5-6, 9-12; Vol. 2, nos. 1-8; Vol. 4, nos. 1-2; Vol. 7, nos. 3-12; Vol. 8, nos. 1-8; Vol. 9, nos. 1-12; Vol. 10, nos. 1-12; Vol. 11, nos. 1-6. Liège, 1877-1887.
- Association des Ingénieurs sortis des Ecoles Spéciales de Gand. Annales. Vol. 16-20, new series Vol. 21-24, Ser. 3, Vol. 1-6, Ser. 4, Vol. 1, Ser. 5, Vol. 2-date. Gand, 1892-date.
- Association for International Conciliation. Documents. Irreg. 1-16, 18, 20-27, 29-date. N. Y., 1907-date.
- Monthly Bulletins. Irreg. April, July 1908-June 1909, August 1909-April 1910, June 1910-February 1911, April 1911-date. N. Y., 1908-date.
- Association Française pour l'Avancement des Sciences. Comptes-rendus de la session. Y. 1-36. Par., 1873-1908.
- Association of American Portland Cement Manufacturers. Bul. Irreg. Nos. 1-4, 7, 9-16, 18-date. Phil., n. d.
- Concrete Review. M. Vol. 2, nos. 9-12; Vol. 3, nos. 1-11; Vol. 4, nos. 1-2, 5-10. Phil., 1908-1909.
- Association of County Surveyors and Civil Engineers of the State of Indiana. See Indiana Engineering Society.
- Association of Edison Illuminating Companies. Minutes of the annual meeting. Vol. 1-17. 1885-1901. N. Y., 1887-1902.

- Association of Electric Lighting Engineers of New England. Transactions. Y. Vol. 1. Bost., 1903-1904.
- Association of Engineering Societies. Journal. M. Vol. 1-date. v. p., 1881-date.
- Association of Gas Engineers and Managers. Report of the proceedings. Y. 1887-1897. Lond., 1888-1898.
- Association of Harvard Engineers. Harvard Engineering Journal. Q. Vol. 1-date. Cambridge, 1902-date. (Vol. 1-6 known as the Journal of the Harvard Engineering Society.) Association of Harvard Engineers was organized in 1908.
- Association of Municipal and Sanitary Engineers and Surveyors. See Incorporated Association of Municipal and County Engineers.
- Association of Railway Superintendents of Bridges and Buildings. See American Railway Bridge and Building Association.
- Association of Railway Telegraph Superintendents. Proceedings of the annual meeting. Y. 7th-26th, 28th-date. Milwaukee, 1888-1907, 1909-date.
- Association of Vermont Engineers. Vermont Engineer. Y. Vol. 1. Burlington, Vt., 1909.
- Association Technique Maritime. Bulletin. Y. No. 10. Par., 1899.
- Associazione Elettrotecnica Italiana. Atti. Bi-M. Vol. 1-9, 11-date. Mil., 1898-1905, 1907-date. No index in Vol. 11. Indice. Vol. 1-10. 1897-1906. Mil., 1908.
- Australasian Association for the Advancement of Science. Report of the meeting. 6th-7th. Sydney, 1895-1898.
- Australasian Institute of Mining Engineers. Proceedings. 1897-1903; Vol. 1, nos. 1-5; Vol. 2, nos. 1-4; Vol. 3, nos. 1-3. Melbourne, 1897-1908. Years 1897-1903 have no volume number. Volume number begins with year 1904.
- Transactions. Irreg. Vol. 1-date. Sydney, 1894-date.
- Australian Mining and Engineering Review. M. Vol. 1-date. October 1908-date. Melbourne, 1908-date.
- Australian Mining Standard. W. Vol. 11, nos. 356-369, 371-372; Vol. 12, nos. 373-425; Vol. 13, nos. 426-428, 430-439, 442, 444-459, 461, 463-467, 469-471, 473-475, 477; Vol. 14, nos. 478-489, 491, 493-496, 498-511, 513-514, 516-517, 519-529; Vol. 15, nos. 530-535, 537-544, 546-549, 551, 555-556, 558, 560-561, 563-565, 568-580; Vol. 17, no. 607; Vol. 18, nos. 622-633; Vol. 19, nos. 634-636, 640-646, 648-659; Vol. 20, nos. 660, 663-679, 681-685; Vol. 28, nos. 717-737; Vol. 29; Vol. 30, nos. 764-790; Vol. 31-date. Melbourne, 1895-1901, 1902-date.
- Automobile. W. Vol. 15-date. N. Y., 1906-date.
- Automotor and Horseless Vehicle Journal. See Automotor Journal.
- Automotor Journal. M. Vol. 2-date. October 1897-date. Lond., 1898-date. (Vol. 2-6 title reads Automotor and Horseless Vehicle Journal.)
- Berg-und Hüttenmännisches Jahrbuch. Q. Vol. 20-22, 27-29, 31-37, 38, pts. 2-3; Vol. 39-40, pt. 3; Vol. 41-date. Wien, 1872-1874, 1879-1881, 1883-1889, 1890-date.
- Berg-und Hüttenmännische Zeitung. W. Vol. 22-43; Vol. 44, nos. 1-35, 37-52; Vol. 45-48; Vol. 49, nos. 1-13, 15-44, 46-50, 52; Vol. 50, nos. 1-7, 9-46, 50-52; Vol. 51, nos. 1-13, 20-52; Vol. 52, nos. 1-38, 40, 43; Vol. 53; Vol. 54, nos. 1, 5-24, 27-28, 31, 33-40,

- 42-52; Vol. 55, nos. 1-9, 11-52; Vol. 56-63. Freiberg, 1863-1904. (In 1904 was incorporated with Glückauf.)
- Bergbau. Bergtechnische Wochenschrift. W. Vol. 23-date. Gelsenkirchen, 1910-date.
- Bergrechtliche Blätter. See Oesterreichische Zeitschrift für Berg und Hüttenwesen. Beilage. Bergrechtliche Blätter.
- Bergwirtschaftliche Mittheilungen. See Zeitschrift für Praktische Geologie. Beiblatt.
- Berliner Elektricitäts- Werke. Mittheilungen. M. Vol. 1-date. Ber., 1905-date.
- Beton und Eisen. M. Vol. 3-date. Ber., 1904-date.
- Bibliothèque Britannique; or, Recueil Extrait des Ouvrages Periodiques et Autres. Sciences et arts. Vol. 1-60. Genève, 1796-1815. (Continued as Bibliothèque Universelle des Sciences. Sciences et arts.)
- Bibliothèque Universelle des Sciences. Sciences et arts. Vol. 1-30. Genève, 1816-1825. (Preceded by Bibliothèque Britannique. Sciences et arts. Continued as Archives des Sciences Physiques et Naturelles.)
- Black Diamond. W. Vol. 3-10; Vol. 11, nos. 1-10, 12-27; Vol. 12-13; Vol. 14, nos. 1-12, 14-26; Vol. 15-16; Vol. 17, nos. 1-3, 5-26; Vol. 18-22; Vol. 23, nos. 2-26; Vol. 24; Vol. 25, nos. 1-14, 16-26; Vol. 26-29; Vol. 30, nos. 1-24, 26; Vol. 31-date. Chic., 1887-date.
- Boiler Maker. M. Vol. 8-date. N. Y., 1908-date.
- Boston Journal of Commerce. W. Vol. 23-62. Bost., 1883-1903. (Vol. 23 title reads Cotton, Wool and Iron and Boston Journal of Commerce. Vol. 24-34 title reads Boston Journal of Commerce and Cotton, Wool and Iron. Vol. 54-62 title reads Boston Journal of Commerce and Textile Industries.)
- Boston Society of Civil Engineers. Monthly Bulletin. M. New series, nos. 1-17, 19-date. Bost., 1906-date.
- Boston Society of Civil Engineers. Proceedings. September 1879-June 1881. Bost., 1881.
- Boston Society of Natural History. Proceedings. Irreg. Vol. 19-date. 1876-date. Bost., 1878-date.
- Brass World and Platers' Guide. M. Vol. 1-date. Bridgeport, Conn., 1905-date.
- Braunkohle. W. Vol. 8-date. April 1909-date. Halle, 1909-date.
- British Almanac of the Society for the Diffusion of Useful Knowledge. Y. 1843, 1848, 1853, 1858, 1867, 1883. Lond., 1843-1883. (See also Companion to the Almanac.)
- Companion to the Almanac or Year-book of General Information. Y. 1828-1868. Lond., 1840-1868. Complete index to the Companion. 1828-1843. Lond., 1843. Year 1828 is ed. 4. See also British Almanac.
- British Annual and Epitome of the Progress of Science; ed. by R. D. Thomson. Y. 1837-1839. Lond., 1837-1838.
- British Architect. W. Vol. 41-46. Lond., 1894-1896.
- British Association for the Advancement of Science. Report of the meeting. 1-8, 11-date. 1831-1838, 1841-date. Lond., 1831-1837, 1841-date. Index to Reports and Transactions. 1831-1860. Lond., 1864.
- British Association of Gas Managers. See Institution of Gas Engineers.
- British Columbia Mining Record. M. Vol. 1-2, 9-14. October 1895-1896, 1902-1907. Victoria, 1895-1896, 1902-1907.

- British Federated Society of Mining Students. *See* British Society of Mining Students.
- British Foundrymen's Association. Proceedings. Biennial. Nos. 6-date. Lond., 1908-date.
- British Iron Trade Association. Annual Statistical Report. Y. 1884, 1886, 1888-1890, 1894, 1899, 1902-1905. Lond., 1885-1905. ——— Bulletin. No. 20, 24-25. Lond., 1892-1893.
- British Refrigeration. M. Vol. 4. Lond., 1901.
- British Society of Mining Students. Journal. Vol. 27, no. 6; Vol. 1-2; Vol. 29, nos. 1-7. Birmingham, June 1905-June 1910. (From October 1907-June 1909 this Society combined with the Birmingham University of Mining Students and formed the British Federated Society of Mining Students. Under name of that Society two volumes were published. Beginning with August 1909 this Society was discontinued. The British Society of Mining Students was restored and their publication was a continuation from that last issued by that Society previous to the federation. Ceased publication with June 1910, Vol. 29, no. 7.)
- Brooklyn Engineers' Club. Proceedings. Y. 1897-date. Brooklyn, N. Y., 1898-date.
- Bucks County Historical Society. Collection of papers read before the Society. Irreg. Vol. 1-date. Riegelsville, Pa., 1909-date.
- Builder. W. Vol. 17-18. Lond., 1859-1860.
- Building News and Engineering Journal. W. Vol. 68-71. Lond., 1895-1896.
- Bulletin des Usines Electriques. Vol. 1-7. Par., 1896-1907.
- Bulletin Technique de la Suisse Romande. S-M. Vol. 34-date. Lausanne, 1908-date.
- Bullettino Telegrafico. M. Vol. 15, 17-21. Roma, 1879, 1881-1885.
- California Academy of Sciences. Bulletin. Vol. 1-2 (no. 1-8). San Francisco, Cal., 1884-1887.
- Occasional papers. Vol. 1, 3-6. San Francisco, Cal., 1890, 1893-1899.
- Proceedings. Vol. 2; Vol. 3, pt. 3; Ser. 2, Vol. 1-6; Ser. 3, Vol. 1, nos. 1-3, 5-10; Vol. 2, nos. 1-2; Ser. 4, Vol. 1, 3. San Francisco, Cal., 1858-1862, 1866, 1888-1896, 1897-1904, 1907-1908.
- California Miners' Association. Annual convention. 3d, 5th, 7th-15th. 1894, 1896, 1898-1906. San Francisco, Cal., 1894, 1897, 1899-1906.
- California University. Geology Department. Bulletin. Irreg. Vol. 1-date. Berkeley, 1893-date.
- Canadian Electrical Association. Proceedings of the convention. Y. 5th, 10th, 12th-16th, 19th-date. Toronto, 1895, 1900, 1902-1906, 1909-date.
- Canadian Electrical News and Engineering Journal. M. Vol. 3-date. Toronto, 1893-date. (Vol. 3-9 title reads Canadian Electrical News and Steam Engineering Journal.)
- Canadian Engineer. M. Vol. 8-date. May 1900-date. Toronto, 1900-date.
- Canadian Gas Association. Proceedings. Y. 3d-date. Hamilton, 1910-date.
- Canadian Institute. Annual report. Y. 1886-1894. Toronto, 1888-1894.

- Proceedings. Irreg. Ser. 3, Vol. 3, 5-7; new series, Vol. 1, pt. 1-2, 4-6; Vol. 2, pts. 1-6. 1885, 1886-1889, 1897-1904. Toronto, 1885-1904. (Continuation of the Canadian Journal of Science, Literature and History. In 1890 title changed to Transactions. In 1897 Institute began again the publication of Proceedings, together with the Transactions.)
- Transactions. Irreg. Vol. 1-date. 1889-date. Toronto, 1891-date.
- Canadian Journal of Industry, Science and Art. M. New series Vol. 1-15. Toronto, 1856-1878. (Vol. 12-15 title reads Canadian Journal of Science, Literature and History. In 1879 title changed to Canadian Institute Proceedings.)
- Canadian Machinery and Manufacturing News. M. Vol. 5-date. Toronto, 1909-date.
- Canadian Magazine of Science and the Industrial Arts. M. Vol. 1-19. Montreal, 1873-1891. (Vol. 1-6 title reads Canadian Patent Office Record and Mechanics' Magazine. Vol. 7-10 title reads Scientific Canadian Mechanics' Magazine and Patent Office Record.)
- Canadian Manufacturer. W. Vol. 34-date. Toronto, 1897-date. (1897-August 1908 title reads Canadian Manufacturer and Industrial World. In September 1908 title changed to Canadian Manufacturer, together with a change from semi-monthly to weekly publication. The weekly edition is divided into editions, namely: Office edition, Construction edition, Power edition, Machinery and Supplies edition.)
- Canadian Manufacturer and Industrial World. See Canadian Manufacturer.
- Canadian Mining Institute. Journal. Y. Vol. 1-date. Ottawa, 1896-date. Index. 1891-1903. t. p. w. (1896-1898 known as the Federated Canadian Mining Institute. The federation consisted of the Mining Society of Nova Scotia, the General Mining Association of Quebec, and the Ontario Mining Institute.)
- Quarterly Bulletin. Q. No. 5-date. Montreal, 1909-date.
- Canadian Mining Journal. M. Vol. 28-date. Ottawa, 1907-date. (Incorporated with and took the volume number of the Canadian Mining Review since March 1907.)
- Canadian Mining Review. M. Vol. 8-16; Vol. 17, nos. 1-3, 5-12; Vol. 18-27. Ottawa, 1889-1907. (Incorporated with and continued as Canadian Mining Journal since March 1907.)
- Canadian Naturalist and Geologist. Irreg. Vol. 1-7, new series Vol. 1-3, 5. Montreal, 1856-1862, 1864-1868, 1870. Years 1856-1868 published bi-monthly. Year 1870 published quarterly. Contains Proceedings of Natural History Society of Montreal.
- Canadian Patent Office Record and Mechanics' Magazine. See Canadian Magazine of Science and the Industrial Arts.
- Canadian Society of Civil Engineers. Report of the annual meeting. Y. 1892-1896, 1898-1908, 1910-date. Montreal, 1892-date.
- Canadian Society of Civil Engineers. Transactions. Irreg. Vol. 1-date. Montreal, 1887-date.
- Canal Record. W. Vol. 1-date. September 1907-date. Ancon, Canal Zone, 1907-date.
- Campagnie Internationale des Téléphones. Bulletin. W. Vol. 1, nos. 1-5, 7-66; Vol. 2, nos. 2-52. Par., 1882-1884.

- Carnegie Institution of Washington. Yearbook. Y. No. 1-6. Wash., 1902-1907.
- Cassier's Magazine. M. Vol. 1-date. November 1891-date. N. Y., 1891-date.
- Castings. M. Vol. 1-date. October 1907-date. Cleveland, 1907-date.
- Cement Age. M. Vol. 2-date. June 1905-date. N. Y., 1905-date. (Concrete Engineering combined with this magazine January 1911.
- Cement and Engineering News. M. Vol. 22, nos. 1, 3-12; Vol. 23-date. Chic., 1910-date.
- Central Station. M. Vol. 1-date. N. Y., 1901-date.
- Centralblatt für Accumulatoren- Elementen- und Accumobilen-Kunde. *See* Centralblatt für Accumulatoren- und Galvanotechnik.
- Centralblatt für Accumulatoren- Technik. *See* Centralblatt für Accumulatoren- und Galvanotechnik.
- Centralblatt für Accumulatoren- und Galvanotechnik. S-M. Vol. 3-9. Ber., 1902-1908. (Vol. 3-4 title reads Centralblatt für Accumulatoren- Elementen- und Accumobilen-Kunde. Vol. 5-8 title reads Centralblatt für Accumulatoren- Technik.)
- Centralblatt für Elektrotechnik. M. Vol. 5-7. Mun., 1883-1885. (Continuation of Zeitschrift für Angewandte Elektrizitätslehre. In 1890 incorporated with Elektrotechnische Zeitschrift.)
- Centralblatt für Mineralogie, Geologie und Paläontologie. S-M. 1900-1906, 1908-date. Stut., 1900-date. Repertorium zum Neuen Jahrbuch für Mineralogie, Geologie und Paläontologie 1905-1909, das Centralblatt für Mineralogie, Geologie und Paläontologie 1905-1909 und die Beilage-Bände 21-28. Stut., 1911.
- Chemical Abstracts. *See* American Chemical Society.
- Chemical and Metallurgical Society of South Africa. Journal. *See* Chemical, Metallurgical and Mining Society of South Africa. Journal.
- Chemical and Metallurgical Society of South Africa. Proceedings. Irreg. Vol. 1-4. May 1894-1904. Johannesburg, 1894-1904.
- Chemical Engineer. M. Vol. 5-date. November 1906-date. Chic., 1906-date.
- Chemical, Metallurgical and Mining Society of South Africa. Journal. M. Vol. 1-date. February 1898-date. Johannesburg, 1898-date. (February 1898-February 1903 title reads Chemical and Metallurgical Society of South Africa. No publication issued from October 1899 and May 1902.)
- Chemical News and Journal of Physical Science. W. Vol. 1-83, 89-date. Lond., 1859-1901, 1904-date. Vol. 77-80, 82 pages cut and missing.
- Chemical Society of London. Journal. M. Vol. 27-date. Lond., 1874-date. Index of Journal Vol. 1-25, 1848-1872, and to the Memoirs and Proceedings, 1841-1847. Lond., 1874. Collective index of the Transactions and Abstracts. 1873-1882. Lond., n. d. Collective index of the Transactions, Proceedings and Abstracts. 1883-1892. Lond., n. d. Collective index of the Transactions, Proceedings and Abstracts. 1893-1902. 2v. Lond., n. d.

- Chemiker- Zeitung. S-W. Vol. 11, 13-date. Cöthen, 1887, 1889-date. Supplement see Chemisch-Technisches Repertorium.
- Chemisch- Technisches Repertorium. S-W. Vol. 13-date. Cöthen, 1889-date. Supplement to Chemiker- Zeitung. Vol. 13-23, 25 bound with Vol. 13-23, 25 of Chemiker- Zeitung. (Vol. 13-31 title reads Chemisches Repertorium.) General-Register. Vol. 6-10. 1867-1871. Ber., 1873. General-Register. Vol. 11-15. 1872-1876. Ber., 1879. General-Register. Vol. 16-20. 1877-1881. Ber., 1883. General-Register. Vol. 21-25. 1882-1886. Ber., 1889. General-Register. Vol. 26-30. 1887-1891. Ber., 1893. General-Register. Vol. 31-35. 1892-1896. Ber., 1898.
- Chemisches Central-Blatt. General-Register. 5 Folge. 1897-1901. Ber., 1902.
- Chesterfield and Derbyshire Institute of Mining, Civil and Mechanical Engineers. Transactions. Vol. 3, pt. 2; Vol. 6-14. Lond., 1875, 1878-1885.
- Chicago Journal of Commerce. W. Vol. 44-59, 61-71. Chic., 1884-1897.
- City. W. 1883-August 1884. Lond., 1883-1884.
- Civil Engineer and Architects' Journal. M. Vol. 1-22, 27-28. Lond., 1837-1859, 1864-1865.
- Civilingenieur. Q. Vol. 1; new series Vol. 1, pt. 1; Vol. 2, pt. 1; Vol. 8, 14; new series Vol. 24, 26-33. Freiberg-Lpz., 1848, 1853-1854, 1862, 1868, 1878, 1880-1887. (Year 1848 title reads Der Ingenieur.)
- Clay-worker. M. Vol. 49-date. Indianapolis, Ind., 1908-date.
- Club de Engenharia. Revista. M. Vol. 1, nos. 1-8, 12; Vol. 2, nos. 8-9, 11-12; Vol. 3, no. 3. Rio de Janeiro, 1887-1889.
- Coal. W. Vol. 1-2. N. Y., 1882-1883.
- Coal and Coke. S-M. Vol. 17-date. Baltimore, 1910-date.
- Coal Mining Institute of America. Proceedings. Y. 1907-date. Pittsburg, 1907-date.
- Coal Trade Journal. W. Vol. 18-45, 47-date. N. Y., 1879-1906, 1908-date. Vol. 42, pt. 2 lacks index.
- Cold. M. Vol. 1-date. November 1909-date. Watertown, N. Y., 1909-date.
- Cold Storage. M. Vol. 7-10. N. Y., 1902-1903. (With June 1904 consolidated with Ice Trade Journal and continued as Cold Storage and Ice Trade Journal, taking the volume number of Cold Storage.)
- Cold Storage and Ice Association. Proceedings. S-A. Vol. 3-date. Lond., 1902-date.
- Cold Storage and Ice Trade Journal. M. Vol. 11-date. N. Y., 1904-date. (Formed by the consolidation of Ice Trade Journal and Cold Storage in June 1904. In October 1907 took volume number of Ice Trade Journal, which was Vol. 34.)
- Cold Storage and Ice Trade Review. M. Vol. 9-date. Lond., 1906-date.
- Collection Academique, composée des mémoires, actes, ou journaux des plus célèbres académies et sociétés littéraires, étrangères, des extraits des meilleurs ouvrages périodiques, des traités, particuliers, et des pièces fugitives les plus rares concernant l'histoire naturelle et la botanique, la physique expérimentale et la chimie, la médecine et l'anatomie. Vol. 1-9. Partie étrangère. Dijon-Par., 1755-1770.

- Colliery Engineer. *See* Mines and Minerals.
- Colliery Engineer and Metal Miner. *See* Mines and Minerals.
- Colliery Guardian and Journal of the Coal and Iron Trades. W. Vol. 38-date. Lond., 1879-date.
- Colorado Collège. Colorado College studies. Irreg. Vol. 7-10. 1898-1899, 1901, 1903. Colorado Springs, 1898-1903.
- Colorado Scientific Society. Proceedings. Irreg. Vol. 2-date. Denver, Colo., 1885-date.
- Colorado State School of Mines. Bulletin. S-A. Vol. 1-date. Golden, Colo., 1900-date.
- Columbia Engineer. *See* Columbia University. Engineering Society.
- Columbia University. Engineering Society. Columbia Engineer, being Transactions of the Society. 1898-1899, 1906-1908. N. Y., 1899, 1906-1908.
- Columbia University. School of Mines. Engineering Society. Yearbook. Y. 1893-1894. N. Y., 1894.
- Columbia University Quarterly. Q. Vol. 10-date. N. Y., 1907-date.
- Comité des Forges de France. Annuaire. Y. 1904-date. Par., 1904-date.
- Bulletin. 1884-1888, 1890-date. Par., 1884-date.
- Compass. M. Vol. 1-3. N. Y., 1891-1894.
- Compressed Air. *See* Compressed Air Magazine.
- Compressed Air Magazine. M. Vol. 1-date. March 1896-date. N. Y., 1896-date. (March 1896-September 1908 title reads Compressed Air.)
- Concerning Municipal Ownership. M. Vol. 1-5, no. 3-date. N. Y., 1906-date.
- Concrete Engineering. M. Vol. 1-5. Cleveland, 1907-1910. (Combined with Cement Age January 1911.)
- Concrete Institute. Transactions and notes. Irreg. Vol. 1-date. Lond., 1909-date.
- Concrete Review. *See* Association of American Portland Cement Manufacturers. Concrete Review.
- Connecticut Society of Civil Engineers. Papers and Transactions and Proceedings of the annual meeting. Y. 26th. New Haven, 1910.
- Conservation. *See* American Forestry.
- Construction Moderne. W. Ser. 1, Vol. 9-10; Ser. 2, Vol. 1. Par., 1893-1896.
- Copper and Brass. M. Vol. 1, nos. 1-4. March-June 1907. Detroit, Mich., 1907. (Incorporated with Metal Industry in August 1907.)
- Cordage Trade Journal. S-M. Vol. 5-13, 37-date. N. Y., 1892-1896, 1908-date.
- Cornell Civil Engineer. *See* Cornell University. Association of Civil Engineers.
- Cornell University. Association of Civil Engineers. Cornell Civil Engineer. M. Vol. 1-5, 7-date. Ithaca, N. Y., 1893-1897, 1899-date. (Vol. 1-14 title reads Transactions.)
- Crank. 9 numbers yearly. Vol. 6, nos. 5-9. Ithaca, N. Y., 1892. (Continued as Sibley Journal of Engineering.)
- Daguerreian Journal. S-M. Vol. 1. N. Y., 1850-1851.
- Deutsch-Oesterreichischer Telegraphen Verein. Zeitschrift. M. Vol. 1-5, 9-13. Ber., 1854-1858, 1862-1866.

- Deutsche Chemische Gesellschaft. Berichte. M. Vol. 7-date. Ber., 1874-date. (From 1884-1896 issued in two sections: the Berichte and the Referate. The Referate combined with Chemisches Zentralblatt in 1897.) Generalregister. 1868-1877. Ber., 1880. Generalregister. 1878-1887. 2v. Ber., 1888. Generalregister. Vol. 21-29. 1888-1896. 3v. Ber., 1898.
- Deutsche Mechaniker- Zeitung. S-M. 1909-date. Ber., 1909-date. Beiblatt zur Zeitschrift für Instrumentenkunde.
- Deutsche Physikalische Gesellschaft. Literaturverzeichniss. S-M. Vol. 8-date. Brns., 1909-date.
- Verhandlungen. S-M. Vol. 1-7, 11-date. Ber., 1878-1879, 1881-1883, 1909-date. (Vol. 1-7 appeared with Fortschritte der Physik Vol. 34-35, 37-39 (1878-1879, 1881-1883) and not published separately. Year 1892 appeared in Annalen der Physik, Vol. 45 (1892). Vol. 1-7 title reads Physikalische Gesellschaft zu Berlin.)
- Deutsche Töpfer- und Ziegler-Zeitung. S-W. Vol. 40-date. Ber., 1909-date.
- Deutsche Zeitschrift für Luftschiffahrt. S-M. Vol. 13-date. Ber., 1909-date.
- Deutsche Zuckerindustrie. W. Vol. 34-date. Ber., 1909-date.
- Deutscher Geologische Gesellschaft. Zeitschrift. Vol. 1-24. Ber., 1849-1872.
- Deutscher Verein von Gas- und Wasserfachmännern. Verhandlungen. Y. Vol. 29-41, 43-47. 1889-1901, 1903-1907. Mun., 1889-1907.
- Didaskalia, Blätter für Geist, Gemüth und Publicität. Daily. 1854, 1862. n. p., 1854, 1862. Contains articles on electricity, telegraphy and telephony.
- Digest of Physical Tests and Laboratory Practice. Q. Vol. 1, nos. 1-3; Vol. 3, no. 1. Phil., 1896, 1898.
- Dingler's Polytechnisches Journal. W. Vol. 1-date. Stut., 1820-date. (Vol. 1-211 title reads Polytechnisches Journal.) Real index. Vol. 1-78. 1820-1840. Stut., 1843. Real index. Vol. 79-118. 1841-1850. Stut., 1853. Real index. Vol. 119-158. 1851-1860. Stut., 1861. Real index. Vol. 159-198. 1861-1870. Stut., 1871.
- Dublin Quarterly Journal of Science. Q. Vol. 1-3. Dub., 1861-1863.
- L'Eclairage Electrique. W. Vol. 1-53. September 1894-December 1907. Par., 1894-1907. (Known as La Lumière Electrique from April 1879-August 1894 and 1908-date.)
- Ecole d'Application du Genie Maritime. [Papers.] 1884-1889. Par., 1884-1889.
- Economic Geology. S-Q. Vol. 1-date. Lancaster, Pa., 1906-date. (Formed by consolidation of American Geologist in January 1906.)
- Edinburgh Geological Society. Transactions. Irreg. Vol. 2, 5-date. Edin., 1874, 1888-date.
- Edinburgh Journal of Science. Q. Old series Vol. 1-10; new series Vol. 1-6. Lond., 1824-1832. (In 1832 united with Philosophical Magazine and formed the London and Edinburgh Philosophical Magazine.)
- Edinburgh New Philosophical Journal. Q. Vol. 1-14; Ser. 2, Vol. 1-57; new series, Vol. 1-12. Edin., 1819-1860. (Vol. 1-14 title

- reads Edinburgh Philosophical Journal. Incorporated with Quarterly Journal of Science.)
- Edinburgh Review. Q. Vol. 90, 149. Edin., 1849, 1879.
- Eisenbau. M. Vol. 1-date. Lpz., 1910-date.
- Eisen-Zeitung. W. Vol. 25-date. Ber., 1904-date.
- Electric Age. *See* Electrical Age.
- Electric Club, New York. Papers read before the Club. Nos. 4, 9-10, 12, 14-18, 20-27. N. Y., 1887-1891. This Club was in existence from May 1886-June 1894. Papers were also published in Electrical Review, N. Y.
- Electrical Club Journal. *See* Electric Journal.
- Electric Journal. S-M. Vol. 1-2. Chic., 1895-1897.
- Electric Journal. M. Vol. 1-date. 1904-date. Pittsburg, Pa., 1904-date. Topical index. Vol. 1-7. 1904-1910. Pittsburg, n. d. Topical index. Vol. 1-8. 1904-1911. Pittsburg, n. d. (February 1904-May 1905 title reads Electric Club Journal.)
- Electric Light. *See* Electrical Engineer.
- Electric Patents Weekly. W. Nos. 1-8, 14. Wash., 1889.
- Electric Power. M. Vol. 1-9. 1889-June 1896. N. Y., 1889-1896. No more published.
- Electric Railway Gazette. W. Vol. 13-14. N. Y., July 1895-June 1896. (Continuation of Street Railway Gazette.)
- Electric Railway Journal. W. Vol. 32-date. June 1908-date. N. Y., 1908-date. (Formed by the consolidation of Street Railway Journal and Electric Railway Review.)
- Electric Railway Review. M. Vol. 16-19. July 1906-May 1908. Chic., 1906-1908. (Formerly known as Street Railway Review. Title changed July 1906. Consolidated with Street Railway Journal in June 1908 and formed Electric Railway Journal.)
- Electric Telegraph and Railway Review. W. Vol. 1-2. Lond., 1870. (Vol. 1, nos. 1-5 title reads Electric Telegraph Review.)
- Electric Telegraph Review. *See* Electric Telegraph and Railway Review.
- Electric Traction Weekly. W. Vol. 3, nos. 1, 4-5, 11, 13-14, 16, 18-52; Vol. 4-date. Cleveland, O., 1907-date. (Vol. 1-2 known as Interurban Railway Journal.)
- Electric Trunk Line Age. M. Nos. 1-38. October 1907-November 1910. N. Y., 1907-1910. (Consolidated with Railway Electrical Engineer in January 1911.)
- Electrical Age. W. Vol. 5, no. 24; Vol. 6-7, 9-11, 13-14, 15, nos. 1, 3-6, 9-13, 15-26; Vol. 16-22; Vol. 23, nos. 1-20, 24-26; Vol. 24, nos. 1-14, 16-22, 25; Vol. 25, nos. 2-4, 6-12, 14-17, 19, 21, 23, 25-26; Vol. 26, nos. 1-25; Vol. 27, nos. 1-4, 6-9, 11-13, 16-17, 20-26; Vol. 28, nos. 1-16, 18-26; Vol. 29, nos. 1-2, 4-26; Vol. 30-41, no. 5. N. Y., 1889, 1893, 1894-June 1910. (Vol. 6-7 title reads Electric Age. Discontinued June 1910 and combined with Southern Electrician January 1911, retaining the volume number of Electrical Age.)
- Electrical Engineer. W. Old series Vol. 1-6, May 1882-1887; new series Vol. 1-date. 1888-date. Lond., 1882-date. (Vol. 1 title reads Electric Light. Known as Electrical Engineer since May 1883.)
- Electrical Engineer. (N. Y.) Vol. 1-27. N. Y., 1882-1899. (Vol. 1-2 title reads Electrician. Vol. 3-6 title reads Electrician and Electrical Engineer. Vol. 7-27 title reads Electrical En-

- gineer. In March 1899 consolidated with *Electrical World* under the title of *Electrical World and Engineer*.)
- Electrical Engineering*. W. Vol. 1-date. Lond., 1907-date.
- Electrical Engineering* (Chicago). *See Telephone Magazine*.
- Electrical Engineering and Telephone Magazine*. *See Telephone Magazine*.
- Electrical Industries*. M. Vol. 1-7. 1890-1896. Chic., 1890-1896. Weekly *World's Fair* supplement. Vol. 1. June 15-November 2, 1893. Chic., 1893. (Incorporated with *American Electrician* in May 1896.)
- Electrical Magazine*. Q. Vol. 1-2. 1843-1846. Lond., 1845-1846.
- Electrical Magazine*. M. Vol. 1-4, 6-7, 9-date. Lond., 1904-date.
- Electrical News and Telegraphic Reporter*. W. Vol. 1. Lond., 1875.
- Electrical Power*. M. Vol. 1-3. February 1903-December 1905. Lond., 1903-1905.
- Electrical Record*. M. Vol. 1, nos. 1, 3-6; Vol. 2, nos. 1-6; Vol. 3, no. 1; Vol. 4, no. 2-date. N. Y., 1907-date.
- Electrical Review*. W. Vol. 1-date. November 1872-date. Lond., 1872-date. (Vol. 1-29 title reads *Telegraphic Journal and Electrical Review*.)
- Electrical Review and Western Electrician*. W. Vol. 1-date. February 1882-date. N. Y., 1882-date. (Vol. 1 title reads *Review of the Telegraph and Telephone*. Vol. 2-52 title reads *Electrical Review*. In November 1908 *Western Electrician* combined with *Electrical Review* and formed *Electrical Review and Western Electrician*.)
- Electrical Times*. W. Vol. 21-date. Lond., 1902-date. (Vol. 1-18 title reads *Lightning*. Vol. 19-20 title reads *Lightning, the Electrical Times*.)
- Electrical World*. W. Vol. 1-date. N. Y., 1883-date. Index. Vol. 1-28. 1883-1896. N. Y., 1897. Index. Vol. 29-52. 1897-1908. N. Y., 1897-1908. (Continuation of the *Operator*. In March 1899 *Electrical Engineer* consolidated with *Electrical World* under the title of *Electrical World and Engineer*. In January 1906 *American Electrician* consolidated with *Electrical World and Engineer* under the title of *Electrical World*.)
- Electrical World and Engineer*. *See Electrical World*.
- Electrician, a Weekly Journal of Telegraph, Electricity, and Applied Chemistry*. W. Vol. 1-5. Lond., 1862-1864. (Discontinued in May 1864.)
- Electrician*. W. Vol. 1-date. Lond., 1878-date.
- Electrician and Electrical Engineer*. *See Electrical Engineer* (N. Y.)
- Electrician* (N. Y.). *See Electrical Engineer* (N. Y.).
- Electricien, Revue Internationale de l'Electricité*. W. Ser. 1, Vol. 1-9; Ser. 2, Vol. 1-date. Par., 1881-1885, 1891-date. (In January 1891 *Revue Internationale de l'Electricité* was incorporated with *Electricien*. Ser. 1, Vol. 1-9 title reads *Electricien Revue Générale d'Electricité*.)
- Electricité, Revue Scientifique*. Irreg. Vol. 1-6, 8. Par., 1876-1884.
- Electricity*. W. Vol. 1-30. N. Y., 1891-1906. (Ceased publication April 4, 1906.)

- Electricity. W. Vol. 1-5, 7-9, 15-date. Lond., 1890-1893, 1894-1895, 1901-date. (Vol. 1-21 title reads Electricity and Electrical Engineering.)
- Electricity. (In Russian.) M. Vol. 1-4. St. Petersburg, 1880-1883.
- Electricity and Electrical Engineering. *See* Electricity.
- Electro, Revue Internationale de l'Electricité. M. Vol. 3-date. Bruxelles, 1904-date.
- Electrochemical and Metallurgical Industry. M. Vol. 1-7. N. Y., 1902-1907. (Vol. 1-2 title reads Electrochemical Industry. In 1906 Iron and Steel Magazine was incorporated with Electrochemical and Metallurgical Industry. In January 1910 title changed to Metallurgical and Chemical Engineering.)
- Electrochimie. M. Vol. 3-6, 9-11. Par., 1897-1900, 1903-1905. (Continued as Revue de l'Electrochimie et de l'Electrometallurgie.)
- Electrocraft. M. Vol. 3-7. Detroit, Mich., 1907-1911. (Incorporated with Electrical Review and Western Electrician January 1912.)
- Electro-metallurgist and Electric Light Journal. M. Vol. 1, nos. 1-6. January-June 1880. Lond., 1880. In Wheeler pamphlets, Vol. 113:6.
- Electro-techniker. S-M. Vol. 1-4. Wien, 1882-1886. Organ für angewandte Electricität.
- Elektrische Bahnen. *See* Elektrische Kraft-Betriebe und Bahnen.
- Elektrische Bahnen und Betrieb. *See* Elektrische Kraft-Betriebe und Bahnen.
- Elektrische Kraft-Betriebe und Bahnen. Tri-M. Vol. 1-date. Mun., 1903-date. (Vol. 1-2 title reads Elektrische Bahnen. Vol. 1 published bi-monthly. Vol. 2 published semi-monthly. Vol. 3-4 title reads Elektrische Bahnen und Betriebe.)
- Elektrotechnischer Verein in Wien. *See* Elektrotechnik und Maschinenbau.
- Electro-chemist and Metallurgist & Metallurgical Review. M. Vol. 1-4, pt. 2. Westminster, 1901-1904. (Vol. 1, nos. 1-3 title reads Electro-chemist & Metallurgist. 1902 changed to bi-monthly publication. Vol. 3-4 Organ of the Faraday Society. Discontinued December 1904.)
- Elektrochemische Zeitschrift. M. Vol. 9-date. April 1902-date. Ber., 1902-date.
- Elektrotechnik und Maschinenbau. W. Vol. 1-4, 6-date. Wien, 1883-1886, 1888-date. (Continuation of Zeitschrift für Elektrotechnik. Vol. 1-23 title reads Zeitschrift für Electro-technik.)
- Elektrotechnische Zeitschrift. W. Vol. 1-6; Vol. 7, nos. 1-4, 6-12; Vol. 8-18; Vol. 19, nos. 1-47, 49-52; Vol. 20-date. Ber., 1880-date. (In 1890 Centralblatt für Elektrotechnik was incorporated with Elektrotechnische Zeitschrift.)
- Elektrotechnischer Anzeiger. S-W. Vol. 12, nos. 11-103; Vol. 13, nos. 1-104; Vol. 14, nos. 1-93, 95-105; Vol. 15, nos. 1-42, 44-45, 57-58, 60-83, 85-105; Vol. 16, nos. 1-30, 32-102; Vol. 17, nos. 1-44, 46-54, 56-75, 77-93, 95-105; Vol. 18-24, 26-date. Ber., 1895-1907, 1909-date.
- Elektroteknisk Tidsskrift. Tri-M. Vol. 17, 19-date. Kristiana, 1904, 1906-date.
- Elettricità. S-M. Vol. 1-8, 10-date. Roma, 1892-1899, 1901-date.

- L'Elettricista.** Revista mensile diretta da Lamberto Cappanera.
See Natura.
- Elettricità.** W. Vol. 8-10, 13-17, 21-date. Milano, 1889-1891, 1894-1898, 1902-date.
- Engineer** (Chicago). S-M. Vol. 5-45. N. Y.-Chic., 1883-April 1908. (Years 1883-1887 (Vol. 5-14) title reads Mechanical Engineer. In May 1908 incorporated with Power and continued as Power and the Engineer. Scientific Machinist was incorporated with Engineer in September 1898. Steam Engineering was incorporated with Power, date unknown.)
- Engineer** (London). W. Vol. 1-date. Lond., 1856-date.
- Engineer and Machinist and Engineering and Scientific Review.** M. Vol. 1-2. Lond., 1850-1851.
- Engineer and Surveyor.** *See Engineering News.*
- Engineering.** W. Vol. 1-date. Lond., 1866-date.
- Engineering-Contracting.** *See Engineering & Contracting.*
- Engineering and American Contract Journal.** *See Engineering News.*
- Engineering & Building Record and the Sanitary Engineer.** *See Engineering Record.*
- Engineering & Contracting.** W. Vol. 25-date. N. Y.-Chic., 1906-date. (January 1906 Roadmaster and Foreman incorporated with Engineering-Contracting under title of Engineering-Contracting and Roadmaster and Foreman. Volume number was 21. In May 1906 Contract News was incorporated with Engineering-Contracting, changing from monthly to weekly publication, and retaining the volume number of Contract News. In July 1907 Engineering World was incorporated with Engineering-Contracting. 1906-May 1911 title reads Engineering-Contracting.)
- Engineering and Mining Journal.** W. Vol. 1-date. N. Y., 1866-date. (Vol. 1-7 title reads American Journal of Mining. Mining Magazine was incorporated with Engineering and Mining Journal in August 1906.)
- Engineering Association of New South Wales.** Minutes of proceedings. Y. Vol. 1-date. Sydney, 1886-date.
- Engineering Association of the South.** Proceedings. Q. Vol. 6-7; Vol. 9, nos. 3, 5-6; Vol. 11-19; Vol. 20, nos. 2-3; Vol. 21-date. Nashville, 1894, 1896, 1898, 1900-date. (Vol. 6-7 title reads Papers read before the Engineering Association, etc.).
- Transactions. Y. Vol. 6-7, 9-11, 13-16. Nashville, 1894, 1896, 1898-1900, 1902-1905.
- Engineering Digest.** M. Vol. 1-6. N. Y., 1907-1909. (Vol. 1-2 reads Technical Literature. Combined with Industrial Engineering in January 1910 and formed Industrial Engineering and the Engineering Digest.)
- Engineering Magazine.** M. Vol. 1-date. N. Y., 1892-date.
- Engineering Mechanics.** W. Vol. 1-6, 8-16, 18-19. N. Y., 1882-1894, 1896-1897. (Vol. 1-13 title reads Mechanics.)
- Engineering News.** W. Vol. 1-date. Chic.-N. Y., 1874-date. (Vol. 1-2 title reads Engineer and Surveyor. Vol. 3-8, 49-date title reads Engineering News. Vol. 9-18 title reads Engineering News and American Contract Journal. Vol. 19-48 title reads Engineering News and American Railway Journal.) General index. 1874-1890. N. Y., 1891. (2 cop.) Index. 1890-1899. N. Y., 1900. (2 cop.) Index. 1900-1904. N. Y., 1905. Index. 1905-1909. N. Y., 1910.

- Engineering News and American Railway Journal. *See* Engineering News.
- Engineering Press Monthly Index Review. *See* Revue de l'Ingenieur et Index Technique.
- Engineering Record. W. Vol. 3-16, 19-date. N. Y., 1880-1887, 1888-date. (Vol. 3 title reads Plumber and Sanitary Engineer. Vol. 4-13 title reads Sanitary Engineer. Vol. 14-16, no. 18, title reads Sanitary Engineer and Construction Record. Vol. 16, no. 19-Vol. 21 title reads Engineering & Building Record and the Sanitary Engineer.) Vol. 1-2, no. 6, published monthly. Vol. 2, no. 7-Vol. 4, published semi-monthly.
- Engineering Review. M. Vol. 5-date. N. Y., 1895-date. (Vol. 5-10 title reads Heating and Ventilation. Vol. 11 Heating and Ventilation consolidated with the Sanitary Plumber, forming Engineering Review. The volume number of Heating and Ventilation is retained.)
- Engineering Review. M. Vol. 2-date. Lond., 1900-date. (Vol. 2-9 title reads Feilden's Magazine.)
- Engineering Review, published by the Engineering Societies of Purdue University. Y. No. 1-2. Lafayette, Ind., 1905-1906.
- Engineering Society of Columbia University. *See* Columbia University. Engineering Society.
- Engineering Society of Wisconsin. Proceedings of the annual meeting. Y. 3d. 1911. Madison, n. d.
- Engineers' and Power Users' Magazine. M. Vol. 1-8. Bost., 1895-1898. (Vol. 1-5 title reads Lord's Power and Machinery Magazine and Builders' Handbook. Vol. 6 title changed to Engineers' and Power Users' Magazine, which was formed by incorporating Safety Valve and Stationary Engineer with Lord's Power Magazine.)
- Engineers Club of Central Pennsylvania. *See* Engineers Society of Pennsylvania.
- Engineers' Club of Philadelphia. Proceedings. Q. Vol. 1-date. Phil., 1880-date.
- Engineers' Journal and Railway and Public Works Chronicle of India and the Colonies. S-M. Vol. 1. Calcutta, 1858.
- Engineers' Society of Pennsylvania. Journal. M. Vol. 1-date. n. p., 1909-date. (Vol. 1, nos. 1-4 name of Society reads Engineers Club of Central Pennsylvania.)
- Engineers' Society of Western Pennsylvania. Proceedings. 10 nos. yearly. Vol. 1-date. Pittsburg, 1880-date. Index. Vol. 1-20. 1880-1904. Pittsburg, 1906.
- English Mechanic and World of Science. W. Vol. 1-58, 60-64, 67-70, 72-date. Lond., 1865-date. (Vol. 1 title reads English Mechanic. Vol. 2-10 title reads English Mechanic and Mirror of Science and Art. Vol. 11 title reads English Mechanic and Mirror of Science. Vol. 12 title reads English Mechanic World of Science.)
- Escola de Minas de Ouro Preto. Annaes. Y. Nos. 1-5, 7-13. 1881-1885, 1902, 1905-1911. Ouro Preto, 1881-1911. No. 1 is edition 2. Have also edition 2 of no. 2.
- Factory. M. Vol. 1, nos. 3-6; Vol. 2, nos. 1-4; Vol. 3, nos. 1-2; Vol. 4, nos. 1, 3-6; Vol. 5-date.* Chic., 1908-date.
- Faraday Society. Transactions. Irreg. Vol. 1-date. Lond., 1905-date.
- Federated Canadian Mining Institute. *See* Canadian Mining Institute.

- Federated Institution of Mining Engineers. *See* Institution of Mining Engineers.
- Feilden's Magazine. *See* Engineering Review.
- Fer et Acier. M. Vol. 1-date. Bruxelles, 1905-date.
- Field Columbian Museum. *See* Field Museum of Natural History.
- Field Museum of Natural History. Publication. Geological series. Irreg. Vol. 1, nos. 1-11; Vol. 2, nos. 1-10; Vol. 3, nos. 1-date. Chic., 1895-date. (1894-1908 known as the Field Columbian Museum.)
- Publication. Report series. Y. Vol. 1, nos. 1-6; Vol. 2, nos. 1-5; Vol. 3, nos. 1-4; Vol. 4-date. Chic., 1894-1907, 1909-date. (1894-1908 known as the Field Columbian Museum.)
- Financial and Mining Record. W. Vol. 13-20; Vol. 21, nos. 1-24; Vol. 22, nos. 1-10, 12-27; Vol. 23-29; Vol. 30, nos. 1-26; Vol. 31, nos. 1-20. N. Y., 1883-1892. (Years 1883-April 1885 title reads Mining Record.)
- Fire and Water. *See* Fire and Water Engineering.
- Fire and Water Engineering. W. Vol. 1-date. N. Y., 1886-date. (Continuation of Fireman's Journal. Fireman's Journal was incorporated with Fire and Water in November 1886. Vol. 1-32 title reads Fire and Water.)
- Forest Leaves. Bi-M. Vol. 3, no. 9, 11; Vol. 4, nos. 1-6, 10-12; Vol. 5, no. 1-Vol. 6, no. 11; Vol. 7, no. 2-Vol. 8, No. 5, 7-8, 11-12; Vol. 9, no. 2-3, 5-9, 11; Vol. 10, no. 1-12; Vol. 11, no. 2, 5-9, 11; Vol. 12, no. 2, 4, 10; Vol. 13, no. 1-date. Phil., 1892-date.
- Forester. M. Vol. 4, no. 2-9, 11-Vol. 8, no. 12. Wash., 1898-1901.
- Forestry and Irrigation. *See* American Forestry.
- Forestry Quarterly. Q. Vol. 1-2; Vol. 3, no. 2-4; Vol. 4-date. Ithaca, N. Y., 1903-date.
- Fortschritte der Elektrotechnik. Q. Vol. 1-date. Ber., 1887-date.
- Fortschritte der Physik. Vol. 1-55. 1845-1899. Ber., 1847-1900. In 1877 this periodical was issued in 3 sections. The third section, Physik der Erde, continued to 1889. Vol. 34-35, 37-39, 1878-1879, 1881-1883 contain years 1-7 of the Verhandlungen of the Deutsche Physikalische Gesellschaft. Continued in the Berichte der Deutschen Physikalischen Gesellschaft as Litteratur-verzeichnis. Namen- und Sach-Register. Vol. 1-20. 1845-1864. Ber., 1872.
- Fortschritte der Technik. Jahrbuch des Internationalen Instituts für Techno-Bibliographie. Y. 1909. 2v. Ber., 1909. (Continuation of the Repertorium der Technischen Literatur. The monthly publication is called Technische Auskunft and the annual cumulation called Fortschritte der Technik. From 1910-date in this library continues as the Engineering Abstracts of the Journal of the International Institute of Technical Bibliography.)
- Foundry. M. Vol. 1-4, 24-date. Detroit-Cleveland, 1892-1894, 1904-date. Vol. 1 lacks January 1893.
- La France Automobile et Aerienne. W. Vol. 1-date. Par., 1896-date. (Vol. 1-12 reads La France Automobile.)
- Franklin Institute. Journal. M. Vol. 1-date. Phil., 1826-date. Index. Vol. 1-120. 1826-1885. Phil., 1890. Index. Vol. 121-140. 1886-1895. Phil., 1896. (Continuation of American Mechanics' Magazine. Vol. 1-6 title reads Franklin Journal and American Mechanics' Magazine.)

- Franklin Journal and American Mechanics' Magazine. *See* Franklin Institute. Journal.
- Gas and Oil Power. M. Vol. 3-date. Lond., 1907-date.
- Gas Engine. M. Vol. 3-date. Cincinnati, O., 1901-date.
- Gas Engineer's Magazine. M. Vol. 18, 21, 23, 25. Lond., 1902, 1905, 1907, 1909.
- Gas Institute. *See* Institution of Gas Engineers.
- Gasmotorentechnik. M. Vol. 1-5; Vol. 6, nos. 1-9; Vol. 7-date. Ber., 1901-date.
- Gazette de l'Electricien. W. 1906. Par., 1906.
- General Electric Review. M. Vol. 1-3; Vol. 4, nos. 2-6; Vol. 5-6; Vol. 7, nos. 1-3, 5-6; Vol. 8, nos. 1, 4-6; Vol. 9-date. Schenectady, N. Y., 1903-date. (Vol. 1-8, no. 5, title reads General Electric Company Review.)
- General Mining Association of the Province of Quebec. Journal. Vol. 1-2. 1891-1895. Ottawa, 1893-1895. (In 1896 formed a part of the Federated Canadian Mining Institute, which in 1898 became the Canadian Mining Institute.)
- General Time Convention. *See* American Railway Association. Proceedings.
- Génie Civil. W. Vol. 1-31, 33-date. Par., 1880-1897, 1898-date. Vol. 52, no. 6, missing. Table générale des matières. Vol. 21-40. 1892-1902. Par., n. d.
- Geographical Journal. M. Vol. 1-32. Lond., 1893-1908.
- Geological Magazine. M. Vol. 1-3; new series, decade 5, Vol. 6-date. Lond., 1864-1866, 1909-date. (The Geologist was incorporated with this magazine in 1864.)
- Geological Society of America. Bulletin. Q. Vol. 1-date. N. Y., 1890-date. Index. Vol. 1-10. Rochester, 1900.
- Geological Society of London. Proceedings. M. Vol. 1-4. 1826-1845. Lond., 1834-1846.
- Quarterly Journal. Q. Vol. 1-date. Lond., 1845-date. Classified index to Transactions, Proceedings, and Quarterly Journal of the Society up to 1868. Lond., 1870. Index. Vol. 1-50. 2 pts. Lond., 1897.
- Transactions. Irreg. Vol. 1-5; series 2, Vol. 1-7. Lond., 1811-1856.
- Geological Society of South Africa. Proceedings. Vol. 10. Johannesburg, 1908.
- Transactions. Irreg. Vol. 2, nos. 3-11; Vol. 3-4, 6, 8-date. Johannesburg, 1896-1899, 1903, 1905-date.
- Geologisches Zentralblatt. S-M. Vol. 12-date. Lpz., 1909-date.
- Geologiska Föreningens i Stockholm. Förhandlingar. Y. Vol. 9-15. Stockholm, 1837-1893.
- Gesundheits-Ingenieur. W. Vol. 32-date. Mün., 1909-date.
- Giesserei-Zeitung. S-M. Vol. 2-date. Ber., 1905-date.
- Glaser's Annalen für Gewerbe und Bauwesen. *See* Annalen für Gewerbe und Bauwesen.
- Glasgow Mechanics' Magazine and Annals of Philosophy. W. Vol. 1-5. Glasgow, 1824-1826.
- Glückauf. W. Vol. 32-35; Vol. 36, nos. 1-26, 28-52; Vol. 37, nos. 2-52; Vol. 38, nos. 1, 3-6, 8-52; Vol. 39-date. Essen, 1896-date. Inhalts-Verzeichnis. Vol. 31-40. 1895-1904. Essen, 1905.
- Good Lighting and the Illuminating Engineer. M. Vol. 7-date. March 1912-date. N. Y., 1912-date. (Continuation of Illuminating Engineer, N. Y.)

- Graphite. M. Vol. 6-date. Jersey City, N. J., 1904-date.
- Gummi-Zeitung. W. Vol. 22-date. Ber., 1907-date.
- Harvard Engineering Journal. *See* Association of Harvard Engineers.
- Harvard Engineering Society. *See* Association of Harvard Engineers.
- Heating and Ventilating Magazine. M. Vol. 3-date. N. Y., 1906-date.
- Heating and Ventilation. *See* Engineering Review.
- Horseless Age. W. Vol. 1-date. N. Y., 1895-date. Vol. 1-3 published monthly.
- Ice and Refrigeration. M. Vol. 1-date. N. Y., 1891-date.
- Illinois Society of Engineers and Surveyors. Annual report. Y. 2-3, 5-12, 15, 17, 24-date. Chic., 1887-1888, 1890-1897, 1900, 1902, 1909-date.
- Illinois University. Engineering Experiment Station. Bulletin. M. Vol. 1-date. Urbana, Ill., 1904-date.
- Illuminating Engineer. M. Vol. 1-6. N. Y., 1906-February 1912. (From March 1912 has the title Good Lighting and the Illuminating Engineer.)
- Illuminating Engineer (London). M. Vol. 1-date. Lond., 1898-date.
- Illuminating Engineering Society. Transactions. M. Vol. 1-date. N. Y.-Easton, Pa., 1906-date.
- Illuminator. M. Vol. 1-2. Cleveland, O., 1904-1906.
- Imperial Institute of the United Kingdom, the Colonies and India. Bulletin. Irreg. Vol. 2-date. Lond., 1904-date. (Vol. 1-4 issued as a quarterly supplement to the Board of Trade Journal.)
- Imperial Journal of Art, Science, Mechanics and Engineering. Vol. 1-3. Manchester, n. d.
- Incorporated Association of Municipal and County Engineers. Proceedings. Y. Vol. 5, 7-22, 24-30, 33-date. 1878-1879, 1880-1896, 1897-1904, 1906-date. Lond., 1879, 1881-1896, 1898-1904, 1907-date. (In September 1890 the Association of Municipal and Sanitary Engineers and Surveyors was incorporated and the name of the Society became the Incorporated Association of Municipal and County Engineers.) General index. Vol. 1-15 in Vol. 15. Lond., 1889. Index. Vol. 1-30 in Vol. 30. Lond., 1904.
- Incorporated Gas Institute. *See* Institution of Gas Engineers.
- Incorporated Institution of Automobile Engineers. Proceedings. Y. Vol. 1-date. Lond., 1906-date. Index. Vol. 1-5. 1906-1910 in Vol. 5.
- Incorporated Institution of Gas Engineers. Transactions. Y. Vol. 1-12. 1891-1902. Lond., 1892-1903. (Combined with Incorporated Gas institute and formed Institution of Gas Engineers.)
- Incorporated Municipal Electrical Association. Proceedings of the annual convention. Y. 1st-16th. Lond., 1896-1911. (From 1896-1900 known as the Municipal Electrical Association. It was incorporated in April 1901 and name of Association changed to Incorporated Municipal Electrical Association.)
- Index de la Presse Technique. *See* Revue de l'Ingenieur et Index Technique.

- India-rubber and Gutta-percha and Electrical Trades Journal. S-M. Vol. 37-date. Lond., 1909-date.
- India Rubber World. M. Vol. 18-date. N. Y., 1898-date.
- Indian Electrical, Mechanical & Textile News. *See* Indian Industries and Power.
- Indian Engineer. W. Vol. 1-28. Calcutta, 1886-1897.
- Indian Engineering. W. Vol. 1-date. Calcutta, 1887-date.
- Indian Industries and Power. M. Vol. 3-date. Bombay, 1905-date. (Vol. 3-5, no. 4, title reads Indian Electrical, Mechanical & Textile News. Indian Motor News was incorporated with Indian Industries and Power in October 1908.)
- Indiana Engineering Society. Proceedings. Y. 5-13, 16-25, 28-date. Greenfield-Indianapolis, 1885-1893, 1896-1905, 1908-date. (No. 5-6 title reads Proceedings of Association of County Surveyors and Civil Engineers of the State of Indiana. No. 7-10 title reads Proceedings of Indiana Society of Civil Engineers and Surveyors.)
- Indiana Society of Civil Engineers and Surveyors. *See* Indiana Engineering Society.
- L'Industria. W. Vol. 4, 22-date. Milano, 1890, 1908-date.
- Industrial Engineering. M. Vol. 1-2. Pittsburg, 1909. (In January 1910 consolidated with Engineering Digest and formed Industrial Engineering and the Engineering Digest.)
- Industrial Engineering and the Engineering Digest. M. Vol. 7-date. N. Y., 1910-date. (Formed by the consolidation of Industrial Engineering and Engineering Digest in January 1910, retaining the volume number of Engineering Digest.)
- Industrial Magazine. M. Vol. 5, nos. 10-12; Vol. 6-7; Vol. 8, nos. 1-4; Vol. 9, nos. 6-7; Vol. 10, nos. 1-5; Vol. 11, nos. 1-6, 8-12; Vol. 12; Vol. 13, nos. 1-3. October 1906-April 1908; June 1909-June 1910; August 1910-November 1911. N. Y., 1906-1911. (Consolidated with Industrial Engineering January 1912.)
- Industrial Progress. M. Vol. 1-2. Milwaukee, Wis., 1909-1910. (Discontinued with December 1910.)
- Industrial World. W. Vol. 40-41; Vol. 42, nos. 1-33, 45, 51; Vol. 43, nos. 10-23, 25-52; Vol. 44-date. Pittsburg, July 1906-date. (Incorporated American Manufacturer and Iron World in July 1906.)
- Industrial World and Iron Worker. W. Vol. 15-40, 42-50, no. 11 Chic., 1880-Mar. 17, 1898. (Vol. 15-17 title reads Industrial World. In September 1882 the Chicago Commercial Advertiser was incorporated with Industrial World and became Industrial World and Iron Worker. In March 1898 was incorporated with Iron Trade Review.)
- L'Industrie des Tramways et Chemins de Fer. M. Vol. 1, nos. 1-5, 7-8, 10-12; Vol. 2, nos. 1-7; Vol. 3-date. Par., 1909-date.
- L'Industrie Electrique. S-M. Vol. 1-9, 11-date. Par., 1892-1900, 1902-date.
- Industries. W. Vol. 1-14. Lond., 1886-June 9, 1893. (On June 16, 1893, combined with Iron and continued under the title of Industries and Iron, retaining the volume number of Industries.)
- Industries and Iron. W. Vol. 18-27. Lond., 1895-1899. (Discontinued with Vol. 28, 1900.)
- Industry. M. Nos. 30-89. San Francisco, 1891-1895. (No longer published.)
- Ingenieur. S-M. Vol. 2-date. Ber., 1908-date.

Ingenieur. *See* *Civilingénieur*.

Ingenieur Electricien. S-M. Vol. 1. Par., 1886.

Ingeniörs-Föreningen i Stockholm. Föreläsningar. B1-M. Vol. 14-25. Stockholm, 1879-1890.

L'Institut de France. L'Académie des Sciences. L'Académie des Beaux-Arts. L'Académie des Sciences Morales et Politiques par Gaston Darboux et Autres. Par., 1907.

—— Le Palais-L'Institut. L'Académie Française. L'Académie des Inscriptions et Belles-Lettres par Alfred Franklin et Autres. Par., 1907.

Institute of Metals. Journal. Semi-annually. Vol. 1-date. Lond., 1909-date.

Institution of Civil Engineers. Minutes of Proceedings. Q. Vol. 1-date. Lond., 1837-date. Name index. Vol. 1-58. 1837-1879. Lond., 1885. Subject index. Vol. 1-58. 1837-1879. Lond., 1881. Subject index. Vol. 59-118. 1879-1894. Lond., 1895. Subject index. Vol. 119-170. 1894-1907. Lond., 1909. Name index. Vol. 119-170. 1895-1907 and index to Transactions of Engineering Conference 1907. Lond., 1910.

—— Transactions. Irreg. Vol. 1-3. Lond., 1836-1842. (No more published.)

Institution of Civil Engineers of Ireland. Transactions. Y. Vol. 13-17, 19, 23-30, 32-date. Dub., 1882-1887, 1889, 1894-1903, 1904-date.

Institution of Electrical Engineers. Journal. Irreg. Vol. 1-date. Lon., 1872-date. Index. Vol. 1-10. 1872-1882. Lond., 1882. Index. Vol. 11-20. 1882-1891. Lond., 1892. Index. Vol. 21-30. 1892-1901. Lond., 1901. (Vol. 1-19 title reads Society of Telegraph Engineers.)

Institution of Engineers and Shipbuilders in Scotland. Transactions. Y. Vol. 2-7, 9-date. Glasgow, 1859-date. (Vol. 2-14 title reads Institution of Engineers in Scotland. In 1865—Vol. 9—the Scottish Shipbuilders' Association was incorporated with the Institution of Engineers in Scotland. In 1871 was incorporated as Institution of Engineers and Shipbuilders in Scotland.)

Institution of Engineers in Scotland. *See* Institution of Engineers and Shipbuilders in Scotland.

Institution of Gas Engineers. Transactions. Y. 1876-1893, 1896-1897, 1899-1900, 1903-date. Lond., 1876-date. (Years 1876-June 1881 known as the British Association of Gas Managers and the title reads Report of Proceedings of the Annual Meeting. Years 1882-November 1890 known as Gas Institute and title reads Transactions. In 1890 was incorporated and title became Incorporated Gas Institute. In November 1902 the Incorporated Gas Institute combined with the Incorporated Institution of Gas Engineers and formed the Institution of Gas Engineers.)

Institution of Junior Engineers. *See* Junior Institution of Engineers.

Institution of Mechanical Engineers. Proceedings. Q. Lond., 1847-date. Index. 1847-1873. Index. 1874-1884. Index. 1885-1900. Westminster, n. d. Index. 1847-1910.

Institution of Mining and Metallurgy. Transactions. Y. Vol. 1-date. Lond., 1892-date. Index. Vol. 1-13. 1892-1904. Lond., n. d. Index. Vol. 1-15. 1892-1906. Lond., n. d.

- Institution of Mining Engineers. Transactions. Irreg. Vol. 1-date. Newcastle-upon-Tyne, 1889-date. Index. Vol. 1-10. 1889-1896. Newcastle-upon-Tyne, 1898. Index. Vol. 1-30. 1889-1905. Newcastle-upon-Tyne, 1908. Index. Vol. 31-40. 1906-1911. Lond., 1911. (Vol. 1-11 title reads Federated Institution of Mining Engineers.)
- Institution of Naval Architects. Transactions. Y. Vol. 1-date. Lond., 1860-date. Index. Vol. 1-21. Lond., 1881. Index. Vol. 22-28. Lond., 1887. Index. Vol. 29-35. Lond., 1895. Index. Vol. 36-42. Lond., 1901. Index. Vol. 1-46. Lond., 1905.
- Insurance Engineering. M. Vol. 1-date. N. Y., 1901-date.
- International Association of Fire Engineers. Proceedings of the annual convention. Y. 39th. 1911. Roanoke, Va., 1911.
- International Association of Municipal Electricians. Proceedings of the annual convention. Y. 5th-11th, 15th-date. v. p. 1900-1906, 1910-date.
- International Catalogue of Scientific Literature. A-D. Vol. 1-date. Lond., 1902-date. A. Mathematics. B. Mechanics. C. Physics. D. Chemistry.
- International Engineer. M. Vol. 9-11; Vol. 1. N. Y., 1906-1907. (Vol. 9-11 title reads International Steam Engineer.)
- International Institute of Technical Bibliography. Journal. Engineering abstracts. M. 1910-date. Lond., 1910-date. At end of each year this Journal is cumulated in an index of seven subjects, namely: Applied Chemistry, Civil Engineering, Electrical Engineering, Mechanical Engineering, Military Engineering, Mining and Metallurgy, Engineering Supplement. (Continuation of Repertorium der Technischen Literatur and Fortschritte der Technik.)
- International Marine Engineering. M. Vol. 1-date. N. Y., 1897-date. (Vol. 1-11 title reads Marine Engineering.)
- International Railway Congress. Bulletin. (English edition.) M. Vol. 10-12, 22-date. Brussels, 1896-1898, 1908-date.
- Proceedings. (English edition.) Vol. 1-5. Brussels, 1901-1902.
- International Railway Fuel Association. Proceedings of the annual convention. Y. 1st-date. v. p. 1909-date.
- International Steam Engineer. See International Engineer.
- International Verein der Bohringenieur und Bohrtechniker. Zeitschrift. S-M. Vol. 19-date. Wien, 1912-date. (Continuation of Allgemeine Oesterreichische Chemiker- und Techniker-Zeitung. Organ des Verein der Bohrtechniker.)
- International Railroad Master Blacksmiths' Association. Report Lima, O., 1908, 1911.
- Interurban Railway Journal. W. Vol. 2, nos. 1-23. June 16-November 17, 1906. Indianapolis, Ind., 1906. (In January 1907 title changed to Electric Traction Weekly.)
- L'Invention. M. Vol. 8-9, 12-21. Par., 1852-1854, 1857-1866.
- Iowa Electrical Association. Proceedings of the annual convention. Y. 8th, 11th. Des Moines, Iowa, 1908, 1911.
- Iowa Engineering Society. Proceedings of the annual convention. Y. 19th-date. Iowa City, Iowa, 1907-date.
- Iowa Street and Interurban Railway Association. Report of the annual convention. Y. 2d-4th. Dubuque, Iowa, 1905-1907.

- Iron, the Journal of Science and Manufacture. W. Vol. 1-41. Lond., 1873-1893. (Being the new series of the Mechanics' Magazine. United with Industries in June 1893 and continued as Industries and Iron.)
- Iron Age. W. Vol. 24-date. N. Y., 1879-date.
- Iron and Coal Trades Review. W. Vol. 29-46, 49-date. Lond., 1884-1893, 1894-date. (In 1894 the Bulletin of the British Iron Trade Association was incorporated with this magazine.)
- Iron and Machinery World. W. Vol. 92, no. 24-Vol. 96. Chic., December 13, 1902-1904. (Formed by the consolidation of Age of Steel and Iron and Steel in December 1902. Consolidated with Iron Trade Review in August 1906.)
- Iron and Steel. W. Vol. 74-80. Chic., 1889-1902. (In December 1902 combined with Age of Steel and formed Iron and Machinery World.)
- Iron and Steel Institute. Carnegie Scholarship memoirs. Y. Vol. 1-date. Lond., 1909-date. Index. Vol. 1-2. 1909-1910 in Journal Subject and name index. Vol. 59-82. Lond., 1911.
- Journal. S-M. Vol. 1-date. 1869-date. Lond., 1870-date. (Vol. 1-2 title reads Transactions.) Index. 1869-1881. Lond., 1883. Index. Vol. 36-58. 1890-1900. Lond., 1902. Name index. Vol. 1-50. 1869-1896. Lond., 1898. Subject matter index. 1882-1889. Lond., 1891. Brief index. 1869-1894. Lond., 1895. Special volume 1890. Subject and name index. Vol. 59-82. 1901-1910 and Vol. 1-2 of Carnegie Scholarship memoirs. Lond., 1911.
- Iron and Steel Magazine. M. Vol. 7-11. Bost., 1904-1906. (Continuation of Metallographist. Vol. 7 title reads Iron and Steel Metallurgist. In June 1906 incorporated with Electrochemical and Metallurgical Industry.)
- Iron and Steel Trades Journal. W. Vol. 42-date. Lond., 1888-date.
- Iron Trade Review. W. Vol. 28-30, 32-33; 34, nos. 1, 3-10, 12-52; 35-date. Cleveland, O., 1895-1897, 1899-date. (In March 1898 Industrial World and Iron Worker was incorporated with Iron Trade Review. In August 1906 Iron and Machinery World consolidated with Iron Trade Review.)
- Ironmonger. W. Vol. 26-33, 35-40; January-March 22, May 3, July-December 1890; 1891-1899; Vol. 90-93; Vol. 94, January 12-March 23; Vol. 95, April 6-June 29; Vol. 96-99; Vol. 100, July 5-September 20; Vol. 101, October 4-November 22; Vol. 107, June 4-25; Vol. 108, July 2-September 17; Vol. 109-113; Vol. 114, January-March 24; Vol. 115-date. Lond., 1881-date.
- Isolated Plant. M. Vol. 1-date. December 1908-date. N. Y., 1908-date.
- Jahrbuch der Drahtlosen Telegraphie und Telephonie. Bi-M. Vol. 1-date. Lpz., 1907-date.
- Jahrbuch der Electrochemie. Y. Vol. 1-9, 12. 1894-1902, 1905. Halle, 1895-1904, 1909.
- Jahrbuch der Radioaktivität und Elektronik. Vol. 1-4. Lpz., 1904-1907.
- Jahrbuch für das Eisenhüttenwesen. Y. Vol. 1-5. 1900-1904. Düsseldorf, 1902-1907. Ergänzung zu Stahl und Eisen.
- Jahrbuch für den Berg- und Hüttenmann; hrsg. von der Königl. Bergakademie zu Freiberg. Y. 1866-1868. Freiberg, 1866-

1868. (Continued as Jahrbuch für das Berg- und Hüttenwesen im Königreich Sachsen.)
- Jahrbücher der Kaiserliche Königl. Central-Anstalt für Meteorologie und Erdmagnetismus; hrsg. durch die Kaiserliche Akademie der Wissenschaften. Y. Vol. 1-8, new series, Vol. 1-37. Wien, 1854-1900.
- Jahres-Bericht über die Leistungen der Chemischen Technologie; hrsg. von J. R. Wagner. Y. Vol. 1-15, new series, Vol. 1-date. Lpz., 1856-date. (Vol. 1-4 title reads Jahres-Bericht über die Fortschritte der Chemischen Technologie. Vol. 5-10 title reads Jahres-Bericht über die Fortschritte und Leistungen der Chemischen Technologie. In 1870 a new series was formed. The numbering of both series continues to date. Vol. 26-28 title reads Rudolf von Wagner's Jahres-Bericht, etc., fortgesetzt von F. Fischer. Vol. 29-date fortgesetzt von F. Fischer.) General register. Vol. 1-10. Lpz., 1866. General register. Vol. 11-20. Lpz., 1876. General register. Vol. 21-30. Lpz., 1889.
- Jern-Kontorets Annaler. Q. Vol. 1, 3, 5-12, 14-15, 18, 21-29; new series, Vol. 1, pt. 3-6; Vol. 2, 4, 12, pts. 1-4; Vol. 13, pts. 1-6; Vol. 16-27, 28, pts. 4-5; Vol. 29, pts. 3, 6; Vol. 30, pts. 1, 3-6; Vol. 31, pts. 1, 6; Vol. 32-53, 54, pts. 2-6; Vol. 55-62, 64-date. Stockholm, 1817, 1819, 1821-1828, 1830-1831, 1834, 1837-1845, 1846-1847, 1849, 1857, 1858, 1861-1907, 1909-date. Bihang. 1828. Stockholm, 1829. Bihang. 1837. Stockholm, 1839. Bihang. 1868. Stockholm, 1868. Bihang. 1900-date. Stockholm, 1900-date. Register. 1891-1895. Stockholm, 1897. Register. 1896-1900. Stockholm, 1902.
- Journal de Chimie Physique. Irreg. Vol. 1, 4-date. Par., 1903, 1906-date.
- Journal de l'Electrolyse. See Journal du four Electrique et de l'Electrolyse.
- Journal de Physique Théorique et Appliquée. M. Vol. 1-date. Par., 1872-date.
- Journal der Physik. M. Vol. 1-8, new series Vol. 1-4. Halle, 1790-1797. (Vol. 1-4, new series, title reads Neues Journal der Physik. Continued as Annalen der Physik.)
- Journal des Mines. See Annales des Mines.
- Journal des Scavans. Vol. 1-86. 1665-1728. Amsterdam, 1685-1728.
- Journal du four Electrique et de l'Electrolyse. S-M. Vol. 14-date. Par., 1905-date. (Vol. 14-16 title reads Journal de l'Electrolyse.)
- Journal für Gasbeleuchtung. W. Vol. 51, nos. 1-6, 10, 12-25, 27-30, 33-38, 40-43, 45-47, 49-52; Vol. 52-date. Mun., 1908-date. General register. Vol. 32-46. 1889-1903. Mun., 1905. Organ des Deutschen Vereins von Gas- und Wasserfachmännern.
- Journal of Electricity, Power and Gas. W. Vol. 1-date. San Francisco, 1895-date. (Vol. 1-7 title reads Journal of Electricity.)
- Journal of Gas Lighting, Water Supply, etc. W. Vol. 23-50, 51, January 10-May 1, May 15-June 19; Vol. 52, July 3-10, August 7-December 25; Vol. 53-55; Vol. 56, July-November 25, December 9-30; Vol. 58-61, 64-92; Vol. 93, nos. 2225-2230, 2232-2237; Vol. 94-95; Vol. 96, nos. 2264-2268, 2270-2276; Vol. 97-98, 109-date. Lond., 1874-1890, 1891-1893, 1894-1903, 1903-1904, 1905-1907, 1910-date.

- Journal of Geology.** S-Q. Vol. 1-date. Chic., 1893-date.
- Journal of Industrial and Engineering Chemistry.** M. Vol. 1-date. Easton, Pa., 1909-date.
- Journal of Industrial Safety.** M. Vol. 1-2, no. 3. February 1911-March 1912. N. Y., 1911-1912. (No more published.)
- Journal of Natural History, Chemistry, and the Arts.** M. Ser. 1, Vol. 1-5; Ser. 2, Vol. 1-36. Lond., 1797-1813. (United with *Philosophical Magazine* in 1814.)
- Journal of Physical Chemistry.** M. Vol. 6-date. Ithaca, N. Y., 1902-date.
- Journal of the Telegraph.** S-M. Vol. 1-23. N. Y., 1867-1890. (With which the *Telegrapher* was incorporated in February 1877.)
- Journal of the United States Artillery.** Q. Vol. 1-date. Fort Monroe, Va., 1892-date. Index of authors. Vol. 1-20. 1892-1903.
- Journal Télégraphique.** M. Vol. 1-11, 25-date. Berne, 1869-1887, 1901-date.
- Junior Engineering Society.** See *Junior Institution of Engineers.*
- Junior Institution of Engineers.** Journal and record of transactions. Y. Vol. 1-date. Lond., 1884-date. (Vol. 1-4 known as *Junior Engineering Society* and title reads *Record of Transactions*. Vol. 5-12 known as *Institution of Junior Engineers* and title reads *Record of Transactions*.)
- Justus Liebig's Annalen der Chemie.** See *Annalen der Chemie.*
- Kaiserlich-Königliche Geologische Reichsanstalt in Wien.** Jahrbuch. Y. Vol. 1-10, 12-23, 24, pt. 2; 26, 29-date. Wien, 1850-1859, 1861-1874, 1876, 1879-date. General register. Vol. 1-10. 1850-1859. Wien, 1863. General register. Vol. 11-20. 1860-1870. Wein, 1872. General Register. Vol. 21-30. 1871-1880. Wien, 1881. General register. Vol. 41-50. 1891-1900. Wien, 1905.
- Verhandlungen. Irreg. 1858-1859, 1861-1867, 1876, 1880, 1884-date. Wien, 1858-1859, 1861-1867, 1876, 1880, 1884-date. Pages 1-126 missing from year 1899. Years 1858-1866 published with the *Jahrbuch*. General-register. 1891-1900. Wien, 1905.
- Kaiserliche Königliche Technologische Gewerbe-Museum in Wien.** Mitteilungen. Irreg. New series Vol. 14-16, 18-21. Wien, 1904-1906, 1908-1911. (Ceased publication December 1911, but is continued by the *Kaiserliche Königliche Technische Versuchsanstalt in Wien*.)
- Kali.** S-M. Vol. 4-date. Halle, 1910-date.
- Kansas Gas, Water, Electric Light and Street Railway Association.** Proceedings of the annual meeting. Y. 3d, 5th-12th, 14th. v. p., 1900, 1902-1909, 1911.
- Knowledge.** M. Vol. 1-5; new series, Vol. 6-date. Lond., 1882-1884, 1909-date.
- Königliche Materialprüfungsamt zu Gross-Lichterfelde West.** Mitteilungen. Irreg. Vol. 1-date. Ber., 1883-date. (Vol. 1-21 title reads *Königliche Technische Versuchsanstalt*.)
- Königlich Preussische Geologische Landesanstalt und Bergakademie zu Berlin.** Jahrbuch. Y. Vol. 1-date. 1880-date. Ber., 1881-date. Register. Vol. 1-20. 1880-1899. Ber., 1910.
- Königliche Technische Versuchsanstalt.** See *Königliche Materialprüfungsamt zu Gross-Lichterfelde West*.

- Koninklijk Instituut van Ingenieurs. Tijdschrift. Irreg. 1903-1905, 1907-date. 's Gravenhage, 1904-1905, 1907-date.
- Kyoto Imperial University. College of Science and Engineering. Memoirs. Irreg. Vol. 1-date. Kyoto, 1903-date.
- Lake Superior Mining Institute. Proceedings. Y. Vol. 1-date. Lansing, Mich., 1893-date.
- Lead and Zinc News. S-M. Vol. 11-13. September 1906-February 1908. Joplin, Mo., 1906-1908.
- Light Railway and Tramway Journal. M. Vol. 14-date. Lond., 1906-date.
- Lightning. W. Vol. 3-20. Lond., 1893-1901. (Vol. 19-20 reads Lightning, the Electrical Times. Vol. 21 changed to Electrical Times.)
- Liverpool Engineering Society. Transactions. Irreg. Vol. 1-date. 1876-date. Liverpool, 1881-date.
- Locomotive Quarterly. Q. Vol. 5-6; new series Vol. 1-date. Hartford, Conn., 1871-1873, 1880-date.
- London. W. Vol. 1-7. Lond., 1893-1897.
- London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science. M. Ser. 1, Vol. 1-66, 68; Ser. 2, Vol. 1-11; Ser. 3, Vol. 1-37; Ser. 4, Vol. 1-50; Ser. 5, Vol. 1-35, 37-46, 48-50; Ser. 6, Vol. 1-date. Lond., 1789-date. (In 1814 united with Journal of Natural Philosophy and continued as Philosophical Magazine and Journal. In 1826 united with Annals of Philosophy and continued as Philosophical Magazine. In 1832 united with Edinburgh Journal of Science and continued as London and Edinburgh Philosophical Magazine and Journal of Science until 1840.) Index. Ser. 4, Vol. 20-30. Lond., 1860-1865.
- London Electrical Society. Transactions and the proceedings. Y. 1837-1843. Lond., 1841-1843.
- London Mechanics' Register. *See* New London Mechanics' Register.
- Lord's Power and Machinery Magazine and Builders' Handbook. *See* Engineers' and Power Users' Magazine.
- Louisiana Planter and Sugar Manufacturer. W. Vol. 38; Vol. 39, nos. 1-11, 13-26; Vol. 40-date. New Orleans, 1907-date.
- La Lumière Electrique. W. Vol. 1-53. April 1879-August 1894. New series, Vol. 1-date. Par., 1879-1894, 1908-date. (Published as L'Eclairage Electrique 1894-1907. Ser. 1 published monthly.) Index. Vol. 1-10 in Vol. 10. 1883.
- McGraw Electric Railway Manual. Y. Vol. 18-date. N. Y., 1911-date. (An annual issued in connection with the Electric Railway Journal. Continuation of American Street Railway Investments.)
- Machinery. M. Vol. 1-date. N. Y., 1894-date.
- Magazine of Popular Science and Journal of the Useful Arts. Vol. 1-4. Lond., 1836-1837.
- Magazine of Science and School of Arts. Vol. 1. Ed. 3. Lond., 1842.
- Magnet. S-M. Vol. 1, nos. 1-15. N. Y., 1880.
- Manchester Association of Employers, Foremen, and Draughtsmen. *See* Manchester Association of Engineers.
- Manchester Association of Engineers. Transactions. Y. 1883-date. Manchester, 1883-date. (1883-1885 title reads Papers

- Read Before Manchester Association of Employers, Foremen, and Draughtsmen.)
- Manchester Geological and Mining Society. Transactions. Irreg. Vol. 15-date. Manchester, 1880-date. (Vol. 15-27 title reads Manchester Geological Society. Federated with Institution of Mining Engineers in 1904.) Index. Vol. 1-28. Manchester, 1908.
- Manchester Geological Society. *See* Manchester Geological and Mining Society.
- Manchester Literary and Philosophical Society. Memoirs and proceedings. Vol. 1-5; Ser. 2, Vol. 1-15; Ser. 3, Vol. 1-10; Ser. 4, Vol. 1-3, 34-date. Lond., 1789-1802, 1805-1860, 1862-1887, 1888-date.
- Proceedings. Vol. 1-26. Manchester, 1857-1886.
- Manchester Steam Users' Association. Memorandum by chief engineer. Y. 1901-1903, 1905, 1907-date. Manchester, 1901-date.
- Manitoba Historical and Scientific Society. Annual report. Y. 1883-1897. Winnipeg, 1884-1898.
- Transactions. No. 1-5, 15, 17, 19-22, 24, 26-31, 33, 35-38, 40-50, 52. Winnipeg, 1883-1898.
- Manufacturer and Builder. M. Vol. 1-26. N. Y., 1869-1894.
- Manufacturers' Gazette. W. Vol. 6-22. Bost., 1884-1895.
- Manufacturers' Record. W. Vol. 51, nos. 14-26; Vol. 52-57; Vol. 58, nos. 1-9, 16, 19, 22, 25-26; Vol. 59, nos. 3-4, 6-7, 9-26; Vol. 60-date. Baltimore, 1907-date.
- Marine and Railway Gazette. M. Vol. 3, nos. 4-12; Vol. 4, nos. 1-3. Baltimore, 1894.
- Marine Engineer. *See* Marine Engineer and Naval Architect.
- Marine Engineer and Naval Architect. M. Vol. 23, nos. 271-276; Vol. 24, nos. 277-284; Vol. 25, nos. 292-300; Vol. 26-date. Lond., 1901-date.
- Marine Engineering. *See* International Marine Engineering.
- Marine Journal. W. Vol. 19-22. N. Y., 1896-1900.
- Maschinenbauer. Vol. 24. Lpz., 1889.
- Massachusetts Institute of Technology. Abstract of the Proceedings of the Society of Arts. 22d-29th. 1883-1891. Bost., 1884-1891. (Discontinued in 1891. Later numbers published in Technology Quarterly.)
- Master Car and Locomotive Painters' Association of the United States and Canada. Proceedings of the annual convention. Y. 25th, 41st. Reading, Mass., 1894, 1910.
- Master Car-Builders' Association. Report of the proceedings of the annual convention. Y. 1st-6th, 8th-date. 1867-1872, 1874-date. N. Y.-Chic., 1874-date. (Title page of 1st-6th report reads History and Early Reports.)
- Mécanique-Electricité. M. 1908-date. Par., 1908-date.
- Mechanical Engineer. W. Vol. 1-date. Manchester, 1898-date.
- Mechanical Engineers' Association of the Witwatersrand. Journal. M. Vol. 1-3, no. 7. Johannesburg, August 1902-February 1905. (Continued as Transvaal Institute of Mechanical Engineers.)
- Mechanical World and Metal Trades Journal. W. Vol. 15, 17-21; new series Vol. 9-date. Lond., 1883-1886, 1891-date. (Vol. 15-20 title reads Mechanical World and Steam Users' Journal.)
- Mechanical World and Steam Users' Journal. *See* Mechanical World and Metal Trades Journal.

Mechanics. *See* Engineering Mechanics.

Mechanics' Institute of the City of San Francisco. Report of the industrial exhibition. Y. 4th-5th, 7th-9th, 11th-31st. San Francisco, 1864-1865, 1870-1874, 1876-1900.

Mechanics' Magazine. Vol. 1-69; new series Vol. 1-28. Lond., 1823-1872. (Vol. 1-57 title reads Mechanic's Magazine, Museum, Register, Journal and Gazette. New series title reads Mechanics' Magazine and Journal of Engineering, Agriculture, etc. In 1873 incorporated with Iron, being a new series of Mechanics' Magazine.)

Mechanics' Magazine and Register of Inventions and Improvements. M. Vol. 1-5, 7-9. N. Y., 1833-1835, 1836-1837.

Mémorial du Génie Maritime. Irreg. Ser. 3, Vol. 1-9, 12; Ser. 5, pt. 10-date. Par., 1901-1903, 1910-date.

Metal Industry. M. New series, Vol. 1-date. N. Y., 1903-date. (Formed by the incorporation of Aluminum World, Brass Founder and Finisher and Electro-platers Review in January 1903. In August 1907 Copper and Brass was incorporated with Metal Industry.)

Metal Worker, Plumber and Steam Fitter. W. Vol. 69-date. N. Y., 1908-date.

Metallographist. Q. Vol. 1-6. Bost., 1898-1903. (Continued as Iron and Steel Magazine.)

Metallurgical and Chemical Engineering. M. Vol. 8-date. N. Y., 1910-date. (Continuation of Electrochemical and Metallurgical Industry.)

Metallurgical Review. M. Vol. 1-2. N. Y., 1877-1878.

Mexican Institute of Mining and Metallurgy. Transactions. Y. Vol. 1-date. Mexico, 1909-date.

Mexican Mining Journal. M. Vol. 5, 10-date. Mexico, 1907, 1910-date.

Michigan Academy of Science. Report. Y. 1-9. Lansing, Mich., 1900-1907.

Michigan Electrical Association. Proceedings. Y. Vol. 1-date. v. p., 1904-date.

Michigan Gas Association. Proceedings of the annual meeting. Y. 18th-date. v. p., 1909-date.

Michigan State Horticultural Society. Annual report of the secretary. Y. 36th. Lansing, Mich., 1907.

Michigan Technic. *See* Michigan University. Engineering Society. Michigan Technic.

Michigan University. Engineering Society. Michigan Technic. S-A. Vol. 4, 8, 10, 17-date. Ann Arbor, 1888, 1895, 1897, 1904-date. (Vol. 4, 8, 10 title reads The Technic.)

Military Service Institution of the United States. Journal. Bi-M. Vol. 2-8; Vol. 9, nos. 33-34; Vol. 28-32; Vol. 33, nos. 124-126; Vol. 34-38; Vol. 43, nos. 155-date. N. Y., 1881-1888, 1901-1906, 1908-date.

Military Telegraph Bulletin. M. No. 1-65. March 15, 1884-September 16, 1889. Lond., 1884-1889. (No more published.)

Mineralogical Magazine and Journal of the Mineralogical Society. Irreg. Vol. 1, nos. 1-2, 4-7; Vol. 2-3; Vol. 5, nos. 23-26; Vol. 6-date. Lond., 1877-1880, 1884-date. Index. Vol. 1-10. Lond., 1905.

Mineralogical Society. Journal. *See* Mineralogical Magazine and Journal of the Mineralogical Society.

- Mineralogische Mittheilungen.** 1876. Wien, 1876. (Continued as *Mineralogische und Petrographische Mittheilungen*. Years 1871-1873 bound with *Kaiserlich-Königliche Geologische Reichsanstalt in Wien*.)
- Mineralogische und Petrographische Mittheilungen.** New series, Vol. 28-date. Wien, 1909-date. (Continuation of *Mineralogische Mittheilungen*.)
- Mines and Minerals.** M. Vol. 5-date. Scranton, Pa., 1885-date. (Vol. 5-7 title reads *Mining Herald and Colliery Engineer*. Vol. 8-13 title reads *Colliery Engineer*. Vol. 14-17 title reads *Colliery Engineer and Metal Miner*.)
- Mining and Engineering World.** W. Vol. 4, nos. 81-93; Vol. 5, nos. 94-115, 117-119; Vol. 6; Vol. 7, nos. 147-171; Vol. 10; Vol. 11, nos. 250-252, 254-276; Vol. 12; Vol. 13, nos. 1-20, 22-24, 26; Vol. 14, nos. 1-12, 14-26; Vol. 15; Vol. 16, nos. 1-7, 10-26; Vol. 17; Vol. 18, nos. 1-21, 23-26; Vol. 19-date. Butte, Mont.-Chic., 1896-1897, 1899-date. (Known as *Western Mining World* until May 1903. From May 1903-July 1911 known as *Mining World*.)
- Mining and Geological Institute of India.** Transactions. Irreg. Vol. 1-date. Calcutta, 1907-date.
- Mining and Scientific Press.** W. Vol. 10, 20-23, 34-date. San Francisco, 1865, 1870-1871, 1877-date.
- Mining and Scientific Review.** W. New series, Vol. 23-25, 27-30. Denver, Colo., 1889-1890, 1891-1893.
- Mining Association and Institute of Cornwall.** Transactions. Irreg. Vol. 1-4. Camborne, 1887-1895. (Formed by the amalgamation of *Miners' Association of Cornwall and Devon* and the *Mining Institute of Cornwall*.)
- Mining Engineering**, with which is incorporated *Mining*. M. Vol. 1, nos. 2-17, 19-24, 26-29; Vol. 2, no. 30-55; Vol. 3, no. 56-65, 67; Vol. 4, nos. 68-79; Vol. 5, nos. 80-91; Vol. 6, nos. 92-103; Vol. 7, nos. 104-108, 110-115; Vol. 8, nos. 116-127; Vol. 9, nos. 128-139; Vol. 10, nos. 140-date. Lond., 1896-date.
- Mining Herald and Colliery Engineer.** See *Mines and Minerals*.
- Mining Industry.** W. Vol. 2-12. Denver, Colo., 1887-1893.
- Mining Institute of Cornwall.** Proceedings. Irreg. No. 2-3, 5-8, year 1883. Truro, 1877, 1880, 1882-1883. (Combined with *Miners' Association of Cornwall and Devon* in 1887 and formed *Mining Association and Institute of Cornwall*.)
- Mining Institute of Scotland.** Transactions. (5 numbers a year.) Vol. 1-date. Hamilton, 1879-date. Index. Vol. 1-12. 1879-1891. Hamilton, 1891.
- Mining Journal.** W. Vol. 48-58, 60-date. Lond., 1878-1888, 1890-date. (Vol. 48-82 title reads *Mining Journal*, *Railway and Commercial Gazette*. Supplement not bound with volumes.) 75th anniversary number. August 1909.
- Mining Magazine.** M. Vol. 1-date. Lond., 1909-date.
- Mining Magazine.** (N. Y.) Vol. 1-5, 9, 10, no. 5; new series Vol. 1, no. 1-6. N. Y., 1853-1855, 1857-1860.
- Mining Magazine.** M. Vol. 10-13. N. Y., 1904-1906. (*Pacific Coast Miner* was incorporated with this magazine in 1904. Consolidated with *Engineering and Mining Journal* in August 1906.)
- Mining Reporter.** W. Vol. 45, nos. 1-7, 9-26; Vol. 48, nos. 1, 4-13, 15-27; Vol. 49-56, no. 23. Denver, Colo., 1902-1907. (In

- December 1907 combined with Ores and Metals and formed Mining Science, retaining the volume number of Mining Reporter.)
- Mining Review. M. Vol. 2, no. 5-Vol. 5, no. 4. January 1873-December 1874. Georgetown, Colo., 1873-1874.
- Mining Review. S-M. Vol. 7-10. January 1876-April 1877. Denver, Colo., 1876-1877.
- Mining Science. W. Vol. 56, no. 24-date. Denver, Colo., 1907-date. (Continuation of Mining Reporter and Ores and Metals, which combined in December 1907.)
- Mining Society of Nova Scotia. Journal. Irreg. Vol. 1-3, 5, pt. 1-2; Vol. 6-11, 13-date. Halifax, 1892-1895, 1899-1900, 1900-1907, 1908-date.
- Mining World. *See* Mining and Engineering World.
- Mining World and Engineering Record. Vol. 17-29. Lond., 1879-1885.
- Mittheilungen aus der Praxis Dampfkessel- und Dampfmaschinen- Betriebes. *See* Zeitschrift für Dampfkessel und Maschinenbetrieb.
- Mittheilungen aus Justus Perthes' Geographischer Anstalt über wichtige neue Erforschungen auf dem Gesamtgebiete der Geographie. M. Vol. 1-32, 36, nos. 7-12; Vol. 37-43. Gotha, 1855-1886, 1890-1897. Ergänzungsbände. 11v. 1860-1877. Gotha, 1860-1877. Inhaltsverzeichniss. 1855-1864. Gotha, 1865. Inhaltsverzeichniss. 1875-1884. Gotha, 1886.
- Mitteilungen über Forschungsarbeiten auf dem Gebiete des Ingenieurwesens insbesondere aus den Laboratorien der Technischen Hochschulen. Irreg. Vol. 21-date. Ber., 1905-date.
- Mitteilungen über Gegenstände des Artillerie- und Geniewesens. M. Vol. 41-date. Wien, 1910-date.
- Mitteuropäischer Motorwagen- Verein. Zeitschrift. S-M. Vol. 8-date. Ber., 1909-date.
- Model Engineer and Electrician. W. Vol. 20-date. Lond., 1909-date.
- Modern Electrics. M. Vol. 1, nos. 5, 8, 10-date. August, November 1908, January 1909-date. N. Y., 1908-date.
- Modern Light and Heat. M. Vol. 1-11, no. 1. Bost., 1886-1891. (Vol. 1 title reads Modern Light. Continued as Electrical Progress and Development.)
- Mois Scientifique et Industriel. M. Vol. 12-date. Par., 1910-date.
- Monthly Magazine; or, British Register. Irreg. Vol. 1-46. Lond., 1796-1818.
- Monthly Nautical Magazine and Quarterly Review. *See* United States Nautical Magazine and Naval Journal.
- Motorluftschiff-Studiengesellschaft. Jahrbuch. Y. Vol. 4. 1910-1911. Ber., 1911.
- Motorwagen. Tri-M. Vol. 12-date. Ber., 1909-date.
- Munich. Königliche Polytechnische Schule. Mittheilungen. Nos. 1-21, 24-25, 27-28. Mun., 1873-1892, 1896-1897, 1900-1902.
- Municipal Electrical Association. *See* Incorporated Municipal Electrical Association.
- Municipal Engineering. M. Vol. 22-23, 32-date. N. Y., 1902, 1907-date.
- Municipal Engineers of the City of New York. Proceedings. Y. 1903, 1905-date. N. Y., 1904, 1906-date.

- Municipal Journal and Engineer. W. Vol. 12-19, 23-date. N. Y., 1902-1905, 1907-date. Published monthly 1901-1905.
- National Academy of Sciences. Biographical memoirs. Irreg. Vol. 1-4. Wash., 1877-1902.
- Memoirs. Irreg. Vol. 1-8. Wash., 1866-1898.
- National Association of Cement Users. Proceedings of the annual convention. Y. 1st-date. Phil., 1905-date.
- National Association of Cotton Manufacturers. Transactions. Y. Vol. 48-date. Bost., 1890-date. (Vol. 48-79 title reads New England Cotton Manufacturers Association.)
- National Association of Stationary Engineers. License committee. Report. Ed. 2. Chic., 1906.
- National Car and Locomotive Builder. M. Vol. 11-26. N. Y., 1880-1895. (Consolidated with American Engineer in June 1896. Vol. 11-16 title reads National Car Builder.)
- National Car Builder. *See* National Car and Locomotive Builder.
- National Commercial Gas Association. Proceedings of the annual meetings. Y. 3d-date. N. Y., 1905-date.
- National Electric Light Association. Bulletin. M. Vol. 1, nos. 3, 5, 10, 12; Vol. 2, nos. 3-7, 10-12; Vol. 3, nos. 1-6, 9-12; Vol. 4, nos. 1-2, 10-11; Vol. 5, nos. 1-date. N. Y., 1907-date.
- Convention daily. Daily. June 1-4, 1909. N. Y., 1909.
- Proceedings at its convention. Y. 1st-date. N. Y., 1885-date. Index. Conventions 1-32. 1885-1909. N. Y., 1909.
- National Electrical Inspectors' Association. *See* Electrocraft.
- National Engineer. M. Vol. 3-4, 7, 8, nos. 1-10; Vol. 9-date. Chic., 1899-1900, 1903-date.
- National Fire Protection Association. Proceedings of the annual meeting. Y. 1st-date. v. p., 1897-date. Index to subjects covered in the printed records. Chic., 1909.
- Quarterly. Q. Vol. 1-date. Hartford, Conn., 1907-date.
- National Geographic Magazine. M. Vol. 9, no. 5; Vol. 10, no. 8, 11-12; Vol. 11, 12, no. 1-9; Vol. 13, no. 1, 5-8, 12; Vol. 14; Vol. 15, no. 1-4, 6-7, 11-12; Vol. 16, no. 3-12; Vol. 17-date. Wash., 1898-date.
- National Machine Tool Builders' Association. Official report. S-A. Atlantic City, N. J., 1911.
- National Physical Laboratory. Collected researches. Y. Vol. 1-date. Lond., 1908-date.
- Report. Y. 1901-date. Teddington, 1902-date.
- National Telephone Exchange Association. Proceedings. Y. Vol. 1-12. v. p., 1880-1890.
- National Telephone Journal. M. Vol. 2-date. Lond., April 1907-date.
- Natura. M. Vol. 1-4. Firenze, 1877-1881. (Vol. 1-2 title reads L'Elettricista. Rivista Mensuale Diretta da Lamberto Cappanera.)
- Naturae Novitates. S-M. Year 1-13. Ber., 1879-1891.
- Natural History Society of Montreal. *See* Canadian Naturalist and Geologist.
- Nature. W. Vol. 1-67, 79-date. Lond., 1869-1903, 1908-date.
- Nature. Revue des Sciences et de leurs Applications aux Arts et à l'Industrie. Vol. 18. Par., 1889-1890.
- Nautical Gazette. W. Vol. 73-date. N. Y., 1907-date.
- Neues Jahrbuch für Mineralogie, Geologie und Palaeontologie. Irreg. 1839-date. Stut., 1839-date. (1839-1862 title reads

- Neues Jahrbuch für Mineralogie, Geognosie, Geologie und Petrefaktenkunde.) Allgemeines Repertorium. 1840-1849. Stut., 1851. Repertorium. 1905-1909, das Centralblatt für Mineralogie, Geologie und Paläontologie 1905-1909 und die Beilage-Bände 21-28. Stut., 1911.
- Beilage Band. Irreg. Vol. 5-15, 17-19, 28-date. Stut., 1887-1902, 1903, 1909-date.
- New England Cotton Manufacturers Association. *See* National Association of Cotton Manufacturers.
- New England Water Works Association. Journal. Q. Vol. 1-date. Bost., 1886-date. Index. 1882-1903. Bost., 1903.
- New London Mechanics' Register. W. Vol. 1-4, new series, Vol. 1-2. Lond., 1824-1826, 1827-1828. (Vol. 1-4 title reads London Mechanics' Register.)
- New York Academy of Sciences. Annals. Irreg. Vol. 1-date. N. Y., 1879-date.
- Memoirs. Irreg. Vol. 1-2. N. Y., 1895-1905.
- Transactions. Irreg. Vol. 1-16. N. Y., 1881-1898.
- New York Electrical Society. Transactions. Irreg. No. 1-10, 12. N. Y., 1888-1906, 1908.
- New York Mirror. W. Vol. 15-17, 19-20. N. Y., 1837-1839, 1841-1842.
- New York Railroad Club. Proceedings. M. 1897-date. N. Y., 1897-date.
- New Yorker. W. Vol. 3, no. 20-26; Vol. 4-7, 9-10. N. Y., 1837-1840.
- Newcastle-upon-Tyne Chemical Society. Transactions. Irreg. Vol. 1-5. 1868-1882. Newcastle-upon-Tyne, 1871-1883. (Incorporated with Society of Chemical Industry in 1883.)
- New Zealand Institute. Transactions and proceedings. Y. Vol. 1-14, 17-18, 31, 33-35, 37-38, 43-date. Wellington, 1875-1881, 1884-1886, 1898, 1900-1902, 1904-1905, 1910-date. Index. Vol. 1-8. Wellington, 1877. Index. Vol. 1-17. Wellington, 1886.
- New Zealand Institute of Mining Engineers. Transactions. Vol. 1-2. Auckland, 1897-1898.
- Newton's London Journal of Arts and Sciences. M. New series, Vol. 1-23. Lond., 1855-1866.
- Norsk Teknisk Tidsskrift. Bi-M. Vol. 1-15. Kristiania, 1883-1897. (Ceased publication in 1897. Continued as Teknisk Ugeblad.)
- North of England Institute of Mining and Mechanical Engineers. Transactions. Irreg. Vol. 1-date. Newcastle-upon-Tyne, 1852-date. (Vol. 1-18 title reads North of England Institute of Mining Engineers.) General and subject-matter indices. Vol. 1-17. 1852-1868. Newcastle-upon-Tyne, 1869. General index. Vol. 1-38. 1852-1889. Newcastle-upon-Tyne, 1902. Subject-matter index of mining, mechanical and metallurgical literature. 1900-1902. 3v. Newcastle-upon-Tyne, 1902-1907.
- North of England Institute of Mining Engineers. *See* North of England Institute of Mining and Mechanical Engineers.
- North Staffordshire Institute of Mining and Mechanical Engineers. Proceedings. Vol. 13, nos. 1-5. Newcastle-upon-Tyne, 1893-1895.

- Transactions. Vol. 1, 3-4. Newcastle-under-Lyme, 1879-1880. (Continued with Federated Institution of Mining Engineers since 1889.)
- North-East Coast Institution of Engineers and Shipbuilders. Transactions. Y. Vol. 1-date. 1884-date. Newcastle-upon-Tyne, 1885-date.
- Northwestern Electrical Association. Annual convention. 4th. Milwaukee, Wis., 1896.
- Nouvelles Annales de la Construction. M. Ser. 6, Vol. 6-date. Par., 1909-date.
- Nova Scotian Institute of Science. Proceedings and transactions. Irreg. Vol. 4, pts. 1-4; Vol. 5, pts. 2-3; Vol. 6, pts. 2-4; Vol. 7, pts. 2-4; Ser. 2, Vol. 8, pts. 1-4; Vol. 9, pts. 1-4; Vol. 11; Vol. 12, pts. 1-2. Halifax, 1876-1896, 1902-1907. (From 1862-1890 known as Nova Scotian Institute of Natural Science.)
- Nuova Cimento. M. Vol. 1-28; Ser. 2, Vol. 1-16; Ser. 3, Vol. 1-36; Ser. 4, Vol. 1-12; Ser. 5, Vol. 1-date. Pisa, 1855-date. Indice. Ser. 1-4. 1855-1900. Pisa, 1903.
- Oberschlesischer Berg- und Hüttenmännischer Verein. Zeitschrift. M. Vol. 48-date. Kattowitz, 1909-date.
- Oesterreichischer Ingenieur- und Architekten-Verein. Bericht über die XIV Versammlung Deutscher Architekten und Ingenieur, abgehalten am 30, 31 August, 1 und 2 September 1864 zu Wien. Wien, 1865.
- Wochenschrift. W. Vol. 1-16. Wien, 1876-1891. Vol. 7-16 bound with Zeitschrift Vol. 34-43. 1882-1891.
- Zeitschrift. W. Vol. 1-date. Wien, 1849-date. Register. 1849-1870 bound in Vol. 26. Wien, 1874. Register zur Zeit- und Wochenschrift. 1871-1891. Wien, 1882-1893. Register. 1892-1902. Wien, 1903.
- Oesterreichische Zeitschrift für Berg- und Hüttenwesen. W. Vol. 27-date. Wien, 1879-date.
- Beilage. Bergrechtliche Blätter. Q. Vol. 4-date. Wien, 1909-date.
- Beilage. Verein-Mitteilungen. M. Vol. 23-27. Wien, 1904-1908.
- Ohio Electric Light Association. Proceedings of the annual convention. Y. 6th, 9th-13th. Cincinnati, 1900, 1903-1907.
- Ohio Gas Light Association. Question box presented to annual convention. Y. 19th-20th. n. p., 1903-1904.
- Ohio Institute of Mining Engineers. Ohio Mining Journal. No. 1, 4, 17, 21, 24-25. Columbus, O., 1882, 1884, 1888, 1892, 1895.
- Oil and Gas Journal. S-M. Vol. 7-date. St. Louis, 1908-date. (Vol. 7-8 title reads Oil Investors' Journal.)
- Oil Investors' Journal. See Oil and Gas Journal.
- Oil, Paint and Drug Reporter. W. Vol. 77, no. 16-26; Vol. 78-date. N. Y., 1910-date.
- Operator. S-M. Vol. 1-16. March 1874-September 1885. N. Y., 1874-1885. (In October 1885 consolidated with and continued as Electrical World.)
- Ores and Metals. S-M. Vol. 7, nos. 2-12; Vol. 8; Vol. 10-11; Vol. 12, no. 17; Vol. 13, nos. 21-24; Vol. 14-16, no. 23. Denver, Colo., 1898-1899, 1901-December 5, 1907. (In December 1907 combined with Mining Reporter and formed Mining Science, retaining the volume number of Mining Reporter.)

- Organ des Verein der Bohrtechniker. *See* Allgemeine Oesterreichische Chemiker- und Techniker-Zeitung.
- Organ für die Fortschritte des Eisenbahnwesens in Technischer Bezeichnung. S-M. New series, Vol. 47-date. Wiesbaden, 1910-date. (Sach-und Autoren-Register. Years 1864-1873 oder neue Folge, Vol. 1-10 und Supplement-band 1-4. Wiesbaden, 1873. Sach-und Autoren-Register. Years 1874-1883 oder neue Folge, Vol. 11-20 und Supplement-band 5-8. Wiesbaden, 1883. Sach-und Namen-Verzeichnis. Years 1884-1893 oder neue Folge, Vol. 21-30 und Ergänzungs-band 9-11. Wiesbaden, 1894. Sach-und Namen-Verzeichnis. Years 1894-1903 oder neue Folge, Vol. 31-40. Ergänzungsband 12-13. Wiesbaden, 1904. Sach-und Namen-Verzeichnis. Years 1904-1907 oder neue Folge, Vol. 41-44. Wiesbaden, 1908.)
- Ottawa Literary and Scientific Society. Transactions. Irreg. No. 2-4. 1899-1907. Ottawa, 1900-1907.
- Our Magazine. M. 1855-1856. Edin., n. d.
- Pacific Coast Electric Transmission Association. Report of the annual convention. Y. 2d-7th. v. p., 1898-1903.
- Pacific Coast Gas Association. Proceedings of the annual meeting. Y. 13th-date. (Vol. 6-date.) San Francisco, 1905-date.
- Pacific Coast Miner. W. Vol. 7-8. San Francisco, 1903. (Incorporated with Mining Magazine in 1904.)
- Page's Magazine. *See* Page's Weekly.
- Page's Weekly. W. Vol. 1-date. Lond., 1902-date. (Vol. 1-5, no. 4, title reads Page's Magazine.)
- Pattern Maker. *See* Woodcraft.
- Pennsylvania Street Railway Association. Report of the annual meeting. Y. 12th. n. p., 1903.
- Penny Magazine of the Society for the Diffusion of Useful Knowledge. Vol. 1-9; new series, Vol. 10-16. Lond., 1832-1846. (Vol. 15-16 title reads Knight's Penny Magazine. No more published.)
- Penny Mechanic, and the Chemist. W. Vol. 3. Lond., 1838.
- Petroleum. S-M. Vol. 4-date. Ber., October 1908-date.
- Philippine Journal of Science. (6 numbers.) Y. Vol. 1-date. Manila, 1906-date.
- Philosophical Society of Washington. Bulletin. Vol. 1-11, 13, 15, pp. 127-187. Wash., 1874-1892, 1900, 1909. (Ceased publication with Vol. 15, p. 187. Combined with Journal of Washington Academy of Sciences.)
- Photographic Society of London. Journal. Vol. 1. Lond., 1853-1854.
- Physical Review. M. Vol. 1-date. N. Y., 1893-date.
- Physical Society of London. Abstracts of physical papers from foreign sources. Vol. 1-3. Lond., 1895-1897. (Continued as Science Abstracts.)
- Physical Memoirs. Vol. 1. n. p., 1838.
- Proceedings. Irreg. Vol. 1-date. Lond., 1876-date.
- Physikalisch-Technische Reichsanstalt. Wissenschaftliche Abhandlungen. Irreg. Vol. 1-4, pt. 2. Ber., 1894-1906.
- Physikalische Gesellschaft zu Berlin. *See* Deutsche Physikalische Gesellschaft.
- Physikalische Zeitschrift. S-M. Vol. 1-date. Lpz., 1900-date.
- Plumber and Sanitary Engineer. *See* Engineering Record.

- Polytechnic Engineer. Y. 1901-1907, 1910-1912. Brooklyn, N. Y., 1901-1907, 1910-1912.
- Polytechnic Journal. M. Vol. 1-6. Lond., 1839-1842.
- Polytechnisches Journal. See Dingler's Polytechnisches Journal.
- Popular Electricity. M. Vol. 1-date. Chic., 1908-date.
- Popular Science Monthly. M. Vol. 1-date. N. Y., 1872-date. (Vol. 48-57, no. 1, title reads Appletons' Popular Science Monthly.) Index. Vol. 1-40. 1872-1892. N. Y., 1893.
- Popular Science News, Nature, Invention, Electricity, Chemistry, Medicine, Hygiene. M. Vol. 31-32, no. 11. N. Y., January 1897-November 1898.
- Portefeuille Economique des Machines de l'Outilsage et du Matériel Relatifs a la Construction. M. Ser. 3, Vol. 3, 11-12; Ser. 5, Vol. 7-date. Par., 1878, 1886-1887, 1909-date.
- Post Office Electrical Engineers' Journal. Q. Vol. 1-date. Lond., 1908-date.
- Postal, Telegraphic, and Telephonic Gazette. W. Vol. 1. 1883-1884. Lond., 1883-1884.
- Power. W. Vol. 7-date. N. Y., 1886-date. (In November 1884 Steam was incorporated with Power and the title for Vol. 7-11 reads Power-Steam. In May 1903 Science and Industry consolidated with Power. Engineers' Review consolidated with Power in December 1907. In May 1908 Engineer (Chicago) was incorporated with Power and the title became Power and the Engineer. Beginning January 1908 changed from monthly to weekly publication.)
- Power and Lighting Economist. Q. Vol. 1-4. Troy, N. Y., 1901-1904.
- Power and Transmission. M. Vol. 11-12. Mishawaka, 1896-1897.
- Power Wagon. M. No. 51-date. Chic., 1909-date.
- Practical Engineer. W. Vol. 1-4, 7-date. Manchester-Lond., 1887-1890, 1893-date.
- Practical Magazine. Vol. 1-5. Lond., 1873-1875.
- Practical Mechanic and Engineer's Magazine. M. Vol. 1-4; Ser. 2, Vol. 1-2. Glasgow, 1841-1847.
- Practical Mechanics Journal. Vol. 1-8; Ser. 2, Vol. 1-9; Ser. 3, Vol. 1-5. Glasgow, 1848-1870. Illustrated index. Vol. 1-4. London, n. d.
- Praktische Maschinen-Constructeur. S-M. Vol. 1-20, 22, 42-date. Lpz., 1868-1887, 1889, 1909-date. Generalregister. 1868-1880. Lpz., 1881.
- Atlas. 1870-1887, 1889, 1909-date. (Years 1870-1887 bound separately, later volumes bound with text.)
- Progressive Age. S-M. Vol. 9-date. N. Y., 1891-date.
- Prometheus. W. Vol. 20-date. October 1908-date. Ber., 1908-date.
- Public Service. M. Vol. 1-9. Chic., 1906-1910.
- Quarry. M. Vol. 12-date. Lond., 1907-date.
- Quarterly Review. Q. Vol. 94. Lond., 1854.
- Radium. M. Vol. 6-date. Par., 1909-date.
- Railroad Advocate. W. Vol. 1-4, no. 11. N. Y., 1854-1857. (Vol. 4, no. 7, title changed to American Engineer.)
- Railroad and Engineering Journal. M. Vol. 61-66. 1887-1892. N. Y., 1887-1892. (American Railroad Journal and Van Nostrand's Electric Engineering Magazine consolidated in 1887. The volume number is that of the American Railroad Jour-

- nal. Vol. 67 title changed to American Engineer and Railroad Journal.)
- Railroad Car Journal. M. Vol. 2-11. N. Y., 1891-1901. (Vol. 11 title reads Railroad Digest.)
- Railroad Digest. *See* Railroad Car Journal.
- Railroad Gazette. W. Vol. 1-44. Chic.-N. Y., 1870-1908. (In June 1908 combined with Railway Age, forming Railroad Age Gazette. The volume number of Railroad Gazette is retained.)
- Railway Age. W. Vol. 19-45. Chic., 1894-1908. (In June 1908 combined with Railroad Gazette and formed Railroad Age Gazette, retaining the volume number of Railroad Gazette.)
- Railroad Age Gazette. W. Vol. 45-date. N. Y., June 1908-date. (In June 1908 Railroad Gazette combined with Railway Age and formed Railroad Age Gazette, retaining the volume number of Railroad Gazette.)
- Railway and Engineering Review. W. Vol. 20-date. Chic., 1880-date. (Vol. 20-37, no. 13, title reads Railway Review.)
- Railway and Locomotive Engineering. M. Vol. 1-date. N. Y., 1888-date. (Vol. 1-4 title reads Locomotive Engineer. Vol. 5-13 title reads Locomotive Engineering.)
- Railway Club of Pittsburg. Official proceedings. (9 numbers yearly.) Vol. 1-date. Pittsburg, 1902-date.
- Railway Electrical Engineer. M. Vol. 1-date. Chic., 1909-date. (Electric Trunk Line Age consolidated with this magazine in January 1911.)
- Railway Engineer. M. Vol. 30-date. Lond., 1909-date.
- Railway Engineering and Maintenance of Way. M. Vol. 5, nos. 5-12; Vol. 6-date. Chic., 1909-date.
- Railway Gazette. W. Vol. 8-date. Lond., 1908-date. (London edition of Railroad Age Gazette.)
- Railway Machinery. M. Vol. 25-date. N. Y., 1905-date. (Early volumes known as American Journal of Railway Appliances.)
- Railway Master-Mechanic. M. Vol. 16-21, 23-date. Chic., 1893-1898, 1899-date. (With which is incorporated Railway Purchasing Agent and Supply Trade Journal. Vol. 17-18, no. 5, title reads Railway Engineering and Mechanics.)
- Railway News. W. Vol. 91-date. Lond., 1909-date.
- Railway News. (N. Y.) M. Vol. 9, no. 10-Vol. 10, no. 4. N. Y., 1890.
- Railway Reporter. M. Vol. 1, 4-6. Pittsburg, Pa., 1880, 1882-1884.
- Railway Review. *See* Railway and Engineering Review.
- Railway Signal Association. Journal. Q. Vol. 1-date. Bethlehem, Pa., 1909-date.
- Proceedings. Vol. 1-5. 1895-1908. Bethlehem, Pa., 1906-1908. (Vol. 1-2 title reads Digest of Proceedings and is a re-publication of the Proceedings of the Railway Signaling Club and the Railway Signal Association from 1895-1905.)
- Railway Signaling Club. *See* Railway Signal Association.
- Railway Times. W. Vol. 95-date. Lond., 1909-date. (With which is incorporated Herapath's Railway Journal.)
- Railway World. W. Vol. 6-16, 18-21, nos. 1-30, 32-48. Phil., 1880-1890, 1892-1895. (With which was incorporated United States Railroad and Mining Register.)
- Rassegna Mineraria. Tri-M. Vol. 26-date. Torino, 1908-date.

- Recueil de Mémoires, ou Collection de pièces Académiques, concernant la médecine, l'anatomie and la chirurgie, la chymie, la physique expérimentale, la botanique and l'histoire naturelle, tirées des meilleures sources, et mis en ordre par J. Berryat. Vol. 1-4. Dijon-Par., 1754-1770.
- Register of the Arts and Sciences. Bi-W. Vol. 1-4 in 2v. October 1823-June 1827. Lond., 1823-1827.
- Repertorium der Physik. Vol. 1-8. Ber., 1837-1849.
- Repertorium der Physik. Vol. 1-27. Mun., 1866-1891. (Vol. 1-3 title reads Repertorium für Physikalische Technik für Mathematische und Astronomische Instrumentenkunde. Vol. 4-18 title reads Repertorium für Experimental-Physik, für Physikalische Technik.) General-register. Vol. 1-15. Mun., 1881.
- Repertorium der Technischen Literatur. Y. 1823-1853. Ber., 1856. Neue Folge. 1854-1873. 4v. Lpz., 1871-1878. Neue Folge. 1874-1878. 2v. Lpz., 1875-1879. Neue Folge. 1879-1908. 30v. Lpz., 1881-1909. (From 1877 this index was issued from the Kaiserlich Patent Amt. Ceased publication in 1908. Continued as Fortschritte der Technik.)
- Repertory of Arts and Manufactures. *See* Repertory of Patent Inventions.
- Repertory of Arts, Manufactures, and Agriculture. *See* Repertory of Patent Inventions. .
- Repertory of Patent Inventions. Ser. 1, Vol. 1-16; Ser. 2, Vol. 1-45; new series, Vol. 1-18; enlarged series, Vol. 1-40. Lond., 1794-1862. (Ser. 1, Vol. 1-16 title reads Repertory of Arts and Manufactures. Ser. 2, Vol. 1-45, title reads Repertory of Arts, Manufactures, and Agriculture. Index. Ser. 1, Vol. 1-16; Ser. 2, Vol. 1-8. 1794-1806. Lond., 1806.
- Repertorium für Experimental-Physik, für Physikalische Technik. *See* Repertorium der Physik.
- Repertorium für Physikalische Technik für Mathematische und Astronomische Instrumentenkunde. *See* Repertorium der Physik.
- Review of American Chemical Research. M. Vol. 1-6, 8-12. Easton, Pa., 1895-1900, 1902-1906. (Vol. 1-3 formed a part of Technology Quarterly, Vol. 8-10.)
- Revue de l'Aviation. M. Vol. 4-date. Par., 1909-date.
- Revue de l'Electrochimie et de l'Electrometallurgie. M. Vol. 1-date. Par., 1907-date. (Continuation of Electrochimie.)
- Revue de l'Ingenieur et Index Technique. M. Vol. 1-4, 10-date. Lond.-Bruxelles, 1903-1904, 1907-date. (Vol. 1-3 title reads Index de la Presse Technique. Vol. 4 title reads Engineering Press Monthly Index Review. Vol. 10-18 title reads Technical Index.)
- Revue de Mécanique. M. Vol. 1-date. Par., 1897-date. (Vol. 1 lacks June 1897.) Tables décennales des matières et des noms. 1897-1906. Par., 1907.
- Revue de Métallurgie. M. Vol. 1-date. Par., 1904-date.
- Revue Electrique. S-M. Vol. 1-date. Par., 1904-date. (Organ de L'Union des Syndicats de l'Electricité.)
- Revue générale de Sciences Pures et Appliqués. S-M. Vol. 11-date. Par., 1900-date.
- Revue Générale des Chemins de Fer et des Tramways. M. Vol. 16-date. Par., 1893-date.
- Revue Mineralurgique. M. Vol. 1-5. Par., 1903-1907.

- Revue Scientifique, Industrielle et Commerciale des Métaux et Allages. M. Vol. 1-date. Par., 1908-date.
- Revue Universelle des Mines, de la Métallurgie. M. Ser. 1, Vol. 1-40; Ser. 2, Vol. 1-22; Ser. 3, Vol. 1-60; Ser. 4, Vol. 1-date. Par., 1857-date. Tables des matières. Ser. 3. 1888-1902. Par., 1903.
- Richmond Railroad Club. Official proceedings. M. Vol. 1, nos. 1-7; Vol. 2, nos. 3-7, 9; Vol. 3, nos. 1-9. Richmond, Va., 1902-1904.
- Rivista Marittima. M. Vol. 41; Vol. 42, pts. 3-4; Vol. 43, pts. 3-4; Vol. 44-date. Roma, 1908-date.
- Rivista Telegrafica. Vol. 1. Napoli, 1881.
- Rochester Academy of Science. Proceedings. Irreg. Vol. 1-date. 1889-date. Rochester, N. Y., 1891-date.
- Rock Products. M. Vol. 9, no. 7-date. Chic., 1910-date.
- Royal Dublin Society. Economic proceedings. Irreg. Vol. 1-date. Dublin, 1899-date.
- Scientific proceedings. Irreg. New series, Vol. 12-date. Dublin, 1909-date.
- Royal Engineers, Corps of. Papers on subjects connected with the duties of the Corps. Vol. 1, 3-10; new series, Vol. 17-18. Lond., 1837, 1839-1849, 1869-1870. Vol. 1 is ed. 2. (Binders title reads Professional Papers.)
- Royal Geographical Society of London. Journal. Vol. 1-50. 1831-1880. Lond., 1833-1881. Vol. 1 is ed. 2. (Publication ceased with Vol. 50.) Index. Vol. 1-30. Lond., 1844-1867. Index. Vol. 31-50. Lond., 1881-1884. Atlas maps and plates. Vol. 1-11. Lond., 1831-1841.
- Proceedings. Vol. 1-22; new series, Vol. 1-14. 1855-1892. Lond., 1857-1892. (Continued in the Geographical Journal.)
- Supplementary papers. Vol. 1-4. Lond., 1886-1890.
- Royal Geological Society of Cornwall. Transactions. Irreg. Vol. 1-8, 13-date. Lond., 1818-1871, 1908-date.
- Royal Institute of British Architects. Journal. S-M. Ser. 3, Vol. 15-date. Lond., 1908-date. (Included Transactions since 1894.)
- Royal Institution of Great Britain. Notices of proceedings. Irreg. Vol. 1-16. 1851-1901. Lond., 1854-1901. Index. Vol. 1-4. 1851-1866 in Vol. 4. Lond., 1866. Index. Vol. 1-12. 1851-1889 in Vol. 12. Lond., 1889.
- Quarterly Journal of Science, Literature and the Arts. Q. Vol. 1-12, 14-23. Lond., 1817-June 1828. (Vol. 1-5 title reads Journal of Science and the Arts.)
- Royal Society of Arts. Journal. W. Vol. 56-date. Lond., February 1908-date. (Known until January 1908 as Society of Arts.)
- Royal Society of Edinburgh. Proceedings. Irreg. Vol. 15, 17-21, 23-date. Edin., 1887-1888, 1889-1897, 1899-date.
- Royal Society of London. Abridgments from Philosophical transactions relating to electricity, galvanism and magnetism. 15v. Lond., n. d.
- Catalogue of scientific papers. Irreg. Vol. 1-12. 1800-1883. Lond., 1867-1902. Subject index. Vol. 1. Pure mathematics. 1800-1900. Cambridge, 1903. Subject index. Vol. 2. Mechanics. 1800-1900. Cambridge, 1909.

- *Memoirs of the Royal Society; or, New Abridgment of the Philosophical Transactions* by B. Baddam. Vol. 1-5, 8-9. 1665-1740. Lond., 1745, 1739-1740, 1745. (Vol. 1-2, 5, 8-9 are ed. 2.)
- *Philosophical Transactions*. Irreg. Vol. 1-date. Lond., 1665-date. After 1886 (Vol. 177) published in two classes: (a) Natural Science; (b) Natural History. General index. Vol. 1-70, 1665-1780. Lond., 1787. Continuation of alphabetical index. Vol. 71-110. 1781-1820. Lond., 1821.
- *Philosophical Transactions and Collections; Abridged and Disposed under General Heads*. 1665-1750. 12v. Lond., 1722-1756. From 1665-1700. Ed. 3. 3v. Lond., 1722. Same. Ed. 5. 3v. Lond., 1849. From 1700-1720. Ed. 3. 2v. Lond., 1749. From 1720-1732. Vol. 6, pts. 2-4. Lond., 1733. From 1719-1733. 2v. Lond., 1734. From 1732-1744. 2v. Lond., 1747. From 1743-1750. 2v. Lond., 1756.
- *Philosophical Transactions from their Commencement, in 1665 to 1880, Abridged by C. Hutton*. Vol. 1-18. Lond., 1809.
- *Proceedings*. Irreg. Vol. 1-date. 1800-date. Lond., 1832-date. (2 copies of Vol. 1-2.) (Vol. 1-4 title reads *Abstracts of Papers Printed in the Philosophical Transactions*. Vol. 5-6 title reads *Abstracts of Papers Communicated to the Royal Society*.)
- *Record*. 1897. Lond., 1897. Same. Ed. 2. 1901. Lond., 1901.
- *Year-book*. 1896-1898. Lond., 1897-1898.
- Royal Society of New South Wales. *Transactions, journal and proceedings*. Y. Vol. 9-date. Sydney, 1876-date.
- Royal Society of Victoria. *Proceedings*. S-M. New series, Vol. 16-date. Melbourne, 1903-date.
- *Transactions*. Vol. 5, pt. 1. Melbourne, 1909.
- Royal Statistical Society. *Journal*. Q. Vol. 68, pt. 4; Vol. 69, pt. 2; Vol. 72, pt. 3. Lond., 1905-1906, 1909.
- Royal United Service Institution. *Journal*. Q. Vol. 4, no. 15; Vol. 5, no. 17, 19; Vol. 6, no. 21-23. Lond., 1861-1862.
- Rugby Engineering Society. *Proceedings*. Y. Vol. 1-date. Rugby, 1903-date.
- Safety Valve. M. Vol. 10. N. Y., 1896.
- St. Martin's Magazine. Vol. 1. November 1874-December 1875. Lond., 1874-1875. (Continued as *Telegraphist*.)
- Sammlung Elektrotechnischer Vorträge. Vol. 1-10. Stut., 1899-1907.
- Sanitary Engineer. *See* *Engineering Record*.
- Sanitary Engineer and Construction Record. *See* *Engineering Record*.
- Sanitary Era. S-M. Vol. 2-4. N. Y., 1887-1890.
- Sanitary Institute of Great Britain. *Transactions*. Vol. 1. (Includes 3d Congress report 1879.) Lond., 1880.
- Schiffbau. S-M. Vol. 9, nos. 1-2, 4, 6-23; Vol. 10-date. Ber., 1907-date.
- School of Mines Quarterly. Q. Vol. 1-date. November 1879-date. N. Y., 1879-date. Index. Vol. 1-10 in Vol. 10. 1890. Index. Vol. 11-20. 1889-1899. N. Y., 1900. Index. Vol. 21-30 in Vol. 31. 1910.
- Schweizerische Bauzeitung. W. Vol. 55-date. Zürich, 1910-date.

- Schweizerische Elektrotechnische Zeitschrift. Vol. 1-2, 4-date. Zürich, 1904-1905, 1907-date.
- Schweizerischer Elektrotechnischer Verein. Bulletin. Association Suisse des Electriciens. M. Vol. 1-date. Zürich, 1910-date.
- Science. W. Vol. 1-12; new series, Vol. 7-8, 14-date. Cambridge, Mass.-N. Y., 1883-1888, 1898, 1901-date.
- Science Abstracts. M. Vol. 1-date. Lond., 1898-date.
- Scientific American. W. Vol. 2-date. N. Y., 1846-date.
- Scientific American Supplement. W. Vol. 1-date. N. Y., 1876-date. Catalogue. 1876-1910. N. Y., n. d.
- Scientific Arena. M. Vol. 1. June 1886-May 1887. N. Y., 1886-1887.
- Scientific Canadian, Mechanics' Magazine and Patent Office Record. See Canadian Magazine of Science and the Industrial Arts.
- Scientific Digest. M. Vol. 1, nos. 1-5. December 1911-April 1912. Kansas City, Mo., 1911-1912. (No longer published.)
- Scientific Gazette; or, Library of Mechanical Philosophy, Chemistry, and Discovery. Nos. 1-18. Lond., 1825.
- Scientific Memoirs, selected from the transactions of foreign academies of science and learned societies. Pts. 1-18. 1837-1852. Lond., 1837-1852.
- Scientific Roll and Magazine of Systematized Notes. Q. Vol. 1, pt. 1. Climate. Nos. 1-6; pt. 2. Aqueous Vapour. Nos. 7-11; Baric Condition. Nos. 1-2, 6-7, 9-12. Lond., 1880-1897.
- Seismological Journal of Japan. Vol. 17-19. Yokohoma, 1893-1894. (Vol. 1-16 appeared as the Transactions of the Seismological Society of Japan.) Index to Transactions. Vol. 1-16 in Vol. 17. Yokohoma, 1893.
- Seismological Society of Japan. Transactions. Vol. 1-16. 4v. Yokohoma, 1880-1892. (Continued as Seismological Journal of Japan.)
- Shaffner's Telegraph Companion. M. Vol. 1-2, no. 4. N. Y., 1854-1855.
- Sibley Journal of Engineering. (9 numbers yearly.) Vol. 7, nos. 1-5, 7; Vol. 8, nos. 1, 5-9; Vol. 9, nos. 1-3, 5-7; Vol. 10-11; vol. 12, nos. 1, 3-4, 6-9; Vol. 13-date. Ithaca, N. Y., 1893-date. (Continuation of the Crank.)
- Signal Engineer. M. Vol. 1-date. Chic., 1908-date.
- Sociedad de Ingenieros. Boletin. Vol. 9. Lima, 1907.
- Sociedad Geológica Mexicana. Boletin. Vol. 1-date. 1904-date. Mex., 1905-date.
- Società Aeronautica Italiana. Bollettino. Vol. 6-date. Roma, 1909-date.
- Société Belge d'Electriciens. Bulletin. M. Vol. 4, 6-7, 10, 21-date. Bruxelles, 1887, 1889-1890, 1893, 1904-date.
- Société Belge de Géologie de Paléontologie and Hydrologie. Bulletin. Irreg. Vol. 1-date. Bruxelles, 1887-date. Tables générales des matières. Vol. 1-20. 1887-1906. Bruxelles, 1907.
- Nouveaux Memoires. Irreg. Nos. 1, 3. Bruxelles, 1908, 1910.
- Société Chimique de Belgique. Bulletin. M. Vol. 22-date. Gand, 1908-date.

- Société Chimique de France. Bulletin. S-M. Ser. 4, Vol. 1-date. Par., 1907-date. (Continuation of Société Chimique de Paris.) Table alphabetique des matières. Ser. 4. Vol. 1-2. 1907. Par., 1907.
- Société Chimique de Paris. Bulletin. S-M. Ser. 3, Vol. 33-36. Par., 1905-1906. (Continued as Société Chimique de France.) Table analytique des matières. Ser. 1-2. 1854-1874. n. p., n. d. Table alphabetique des matières. 1875-1888. Par., 1894. Table alphabetique des matières. 1889-1898. 2v. Par., 1903. Table alphabetique des auteurs. Ser. 3, Vol. 31-36. 3v. Par., 1904-1906.
- Société d'Encouragement pour l'Industrie Nationale. Bulletin. M. Vol. 1-date. Par., 1802-date. Table générale des matières. 1802-1900. Par., 1838-1902.
- Société de l'Industrie Minérale. Atlas. Y. Vol. 1-7, 15; Ser. 2, Vol. 1-15; Ser. 3, Vol. 1-15; Ser. 4, Vol. 2. Saint-Etienne, 1855-1862, 1869-1870, 1872-1901, 1903.
- Société de l'Industrie Minérale. Bulletin. M. Vol. 1-15; Ser. 2, Vol. 1-15; Ser. 3, Vol. 1-15; Ser. 4, Vol. 1-date. Saint-Etienne, 1855-date. Table des matières. Vol. 1-15 in Ser. 1, Vol. 15. 1855-1870. Par., 1870. Table analytique matières. Ser. 2, Vol. 1-15. 1871-1886. n. p., n. d. Table analytique matières. Ser. 3, Vol. 1-15. 1887-1901. n. p., n. d. Table générale des matières du Bulletin. Ser. 4, Vol. 1-15. 1902-1911 et dans les Comptes rendus mensuels. 1902-1911. Saint-Etienne, 1912.
- Comptes-rendus Mensuels. M. May 1877, April 1879-September 1893; November 1893-April 1896; June 1896-June 1900; August 1900-December 1908, 1909-date. Saint-Etienne, 1877, 1879-date. 1909-date bound with Bulletin. Table des matières. 1872-1877. n. p., n. d. Table générale des matières du Bulletin. Ser. 4, Vol. 1-15. 1902-1911 et dans les Comptes rendus mensuels. 1902-1911. Saint-Etienne, 1912.
- Société des Ingénieurs Civils de France. Mémoires et travaux. M. 1880-date. Par., 1880-date. Table générale des matières. 1885-1904. Par., 1905.
- Société Française de Mineralogie. Bulletin. Irreg. Vol. 30-date. Par., 1909-date.
- Société Française de Physique. Bulletin des séances. Irreg. Par., 1900-1904, 1906-date.
- Société Géologique de Belgique. Annales. Irreg. Vol. 30-date. Liège, 1902-date.
- Mémoires. Vol. 2, pt. 1-2. Liège, 1904, 1910.
- Société Géologique de France. Bulletin. Irreg. Vol. 1-14; Ser. 2, Vol. 1-29; Ser. 3, Vol. 1-8, 10-28; Ser. 4, Vol. 1-date. Par., 1830-date. Table générale et analytique. Ser. 2, Vol. 1-20. 1844-1863. Par., 1867.
- Compte rendes des Séances. S-M. Ser. 3, Vol. 21; Vol. 22, nos. 1-10, 12-18; Vol. 23, nos. 1-15, 17-18; Vol. 24. Par., 1893-1896.
- Memoires. Irreg. Vol. 1-5; Ser. 2, Vol. 1-9. Par., 1833-1873.
- Société Géologique du Nord. Annales. Y. Vol. 8, 32-date. Lille, 1880-1881, 1903-date.
- Société Industrielle de Mulhouse. Bulletin. M. Vol. 72-date. Mulhouse, 1902-date.

- Société Internationale des Electriciens. Bulletin. M. Ser. 1, Vol. 1-17; Ser. 2, Vol. 1-date. Par., 1884-date.
- Société Scientifique Industrielle de Marseille. Bulletin. Irreg. Vol. 31-37. Marseille, 1903-1909.
- Société Technique de l'Industrie du Gaz en France. Compte-rendu du congrès. Y. 1st-30th. Par., 1874-1909. List of members de la Société 1886-1908 found in Compte-rendu 1888-1909.
- Society for the Promotion of Engineering Education. Proceedings. Y. Vol. 1-date. 1894-date. v. p., 1894-date. Index. Vol. 1-10 in Vol. 10. 1902.
- Society of Arts. Journal. W. Vol. 1-23, 25-31, 33-56. Lond., 1852-1875, 1877-1883, 1885-January 1908. (Continued as Royal Society of Arts.) Index. Vol. 1-20. Lond., 1863-1873. Index. Vol. 31-50. Lond., 1895-1904.
- Society of Automobile Engineers. Transactions. Y. Vol. 3, no. 2; Vol. 4-date. N. Y., 1903-date.
- Society of Chemical Industry. Journal. S-M. Vol. 1-date. Manchester-Lond., 1882-date. Vol. 1-20 issued monthly. Collective index. Vol. 1-14. 1882-1895. Lond., 1899. Decennial index. Vol. 15-24. 1896-1905. 2v. Lond., 1907-1908. (Newcastle-upon-Tyne Chemical Society was incorporated with Society of Chemical Industry in 1883.)
- Society of Engineers. Transactions. Y. 1861-date. Lond., 1861-date. Index. 1861-1909 in volumes for 1886-1909. Lond., 1887-1909.
- Society of Mechanical Engineers, Tokyo, Japan. Journal. Y. Vol. 1-date. Tokyo, 1897-date.
- Society of Naval Architects and Marine Engineers. Transactions. Y. Vol. 1-date. N. Y., 1893-date. Table of contents. Vol. 1-6. N. Y., n. d.
- Society of Telegraph Engineers. *See* Institution of Electrical Engineers.
- Sound Waves. M. Vol. 5, nos. 2-6; Vol. 6-15, no. 1. December 1902-January 1908. Chic., 1902-1908. (Incorporated with Telephony in September 1908.)
- South African Association for the Advancement of Science. South African Journal of Science. M. Vol. 6-date. Cape Town, 1909-date.
- South African Association of Engineers. Journal. M. Vol. 14-16, no. 4. Johannesburg, 1908-1911. (In February 1911 consolidated with South African Institute of Engineers.)
- South African Association of Engineers and Architects. Annual report. Y. 1st-2d. Johannesburg, 1893-1894.
- Proceedings. Vol. 3-5. Johannesburg, 1895-1899.
- South African Engineering, with which is incorporated South African Export List. M. Vol. 4-9, 11-date. Lond., 1905-1908, 1909-date.
- South African Institute of Electrical Engineers. Transactions. M. Vol. 1-date. November 1909-date. Johannesburg, 1909-date.
- South African Institute of Engineers. Journal. M. Vol. 9, no. 5-date. Johannesburg, December 1910-date. (In February 1911 South African Association of Engineers and Transvaal Institute of Mechanical Engineers was incorporated with this Institute.)

- South African Journal of Science. *See* South African Association for the Advancement of Science.
- South Staffordshire Institute of Iron and Steel Works Managers. Proceedings. Irreg. Vol. 6-14. Stourbridge, 1890-1899. (Continued as Staffordshire Iron and Steel Institute.)
- South Wales Institute of Engineers. Proceedings. Irreg. Vol. 17, no. 5; Vol. 25-date. Lond., 1891, 1907-date.
- Southern Electrician. M. Vol. 7-10; Vol. 42-date. Atlanta, Ga., 1909-date. (In January 1911 Electrical Age consolidated with this magazine. The volume number of Electrical Age is retained.)
- Southern Railway Time Convention. *See* American Railway Association. Proceedings.
- Spolek Architektuv a Inzenyru v Království Geském. *See* Technický Obzor.
- Sprechsaal. W. Vol. 42-date. Coburg, 1909-date.
- Sprengstoffe, Waffen und Munition. S-M. Vol. 4-date. Charlottenburg, 1908-date.
- Staffordshire Iron and Steel Institute. Proceedings. Irreg. Vol. 15-date. Stourbridge, 1899-date. (Continuation of South Staffordshire Institute of Iron and Steel Works Managers.)
- Stahl und Eisen. S-M. Vol. 1-date. July 1881-date. Düsseldorf, 1881-date. Gesamt-Inhaltsverzeichnis. Vol. 1-26. 1881-1906. Düsseldorf, 1908.
- Stationary Engineer. M. Vol. 16-17. Chic., 1895-1897.
- Steamship. M. Vol. 19, nos. 223-228; Vol. 20-date. Leith, January 1908-date.
- Stevens Institute Indicator. Q. Vol. 4-date. Hoboken, N. J., 1887-date.
- Stone. M. Vol. 6, no. 5; Vol. 11, nos. 5-6; Vol. 12-27, no. 2; Vol. 28, nos. 10-12; Vol. 29-date. Chic.-N. Y., 1893, 1895-1903, 1908-date. (Ceased publication in 1904; began again in 1908.)
- Stone & Webster Public Service Journal. M. Vol. 1-date. Bost., 1907-date.
- Street Railway Association of the State of New York. Report of the annual meeting. Y. 1st, 3d-14th, 18th-22d, 25th, 27th-date. v. p., 1883-1897, 1900-1904, 1907, 1909-date.
- Street Railway Bulletin. M. Vol. 5, nos. 9-12; Vol. 6; Vol. 7, nos. 1-7, 9-12; Vol. 8-date. N. Y., September 1906-date.
- Street Railway Claim Agents' Association of America. *See* American Street and Interurban Railway Association.
- Street Railway Gazette. M. Vol. 1-12. N. Y., 1886-June 1895. (Continued as Electric Railway Gazette.)
- Street Railway Journal. M. Vol. 5, 7-31. 1889, 1891-May 1908. N. Y., 1889, 1891-1908. (Consolidated with Electric Railway Review in June 1908 and formed Electric Railway Journal, retaining the volume number of the Street Railway Journal.) General index. Vol. 1-22. 1884-1903. N. Y., 1904.
- Street Railway Review. M. Vol. 1-3, 5-15; Vol. 16, nos. 1-4, 6. 1891-1893, 1895-June 1906. Chic., 1891-1906. (Continued as Electric Railway Review beginning July 1906.)
- Surveyor, Engineer, and Architect. M. 1840-1842. Lond., 1840-1842.
- Surveyors' Institution. Transactions. Irreg. Vol. 40; Vol. 41, pts. 1-4, 6-13; Vol. 42-date. Lond., 1907-date. Index. Vol. 1-42. 1868-1910. Lond., 1910.

- Sydney University Engineering Society, New South Wales. Journal and abstract of proceedings. Irreg. Vol. 11-date. Sydney, 1906-date.
- Technic. *See* Michigan University. Engineering Society. Michigan Technic.
- Technical Index. *See* Revue de l'Ingenieur et Index Technique.
- Technical Literature. *See* Engineering Digest.
- Technical Society of the Pacific Coast. Transactions. Annually. Vol. 1-9, 10, nos. 1-2, 4. San Francisco, 1884-1893.
- Technicky Obzor. W. Vol. 13, nos. 33, 36-37; Vol. 14, nos. 5-6, 8-24, 26-30, 32-40; Vol. 15, nos. 1-22, 24-40; Vol. 16, nos. 1-2, 4-41; Vol. 17-date. Praha, 1905-date.
- Technics. M. Vol. 1-4, no. 20. Lond., 1904-August 1905. (No longer published.)
- Technique Moderne. M. Vol. 1-date. Par., December 1908-date.
- Technische Auskunft. *See* Fortschritte der Technik.
- Technologist. M. Vol. 1-2. N. Y., 1870-1871.
- Technology Quarterly. M. Vol. 1-21. Bost., 1887-1908. (Discontinued December 1908.)
- Technology Review. Q. Vol. 1-date. Bost., 1899-date.
- Teknisk Tidskrift. M. 1891-date. Stockholm, 1891-date.
- Teknisk Ugeblad. W. Vol. 22-date. Kristiania, 1904-date.
- Telegrafista. Vol. 1-3, 5. Roma, 1881-1883, 1885.
- Telegraph Age. S-M. Vol. 14-24, 19-21, 23-26. N. Y., 1894-1909. (Continued as Telegraph and Telephone Age. In 1902 a correction was made in the volume number, hence Vol. 19-24 are for years 1896-1901 and also for 1902-1906.)
- Telegraph and Telephone Age. S-M. Vol. 27-date. N. Y., 1910-date. (Continuation of Telegraph Age.)
- Telegraph Chronicle and Civil Service Recorder. S-M. Vol. 19, nos. 237, 239-247; Vol. 20-27; Vol. 28, nos. 352-361, 363-364; Vol. 29-date. Lond., 1902-date.
- Telegraph Electrical Society. Transactions. 1874-1878. Melbourne, 1875-1878.
- Telegrapher. M. Vol. 1-13, no. 551. N. Y., 1864-1877. (In February 1877 incorporated with Journal of the Telegraph.)
- Telegraphic Journal. W. Vol. 1-2. Lond., 1864.
- Telegraphic Journal and Electrical Review. *See* Electrical Review (London).
- Telegraphist. M. Vol. 1-3. Lond., 1884-1886.
- Telegraphist. Irreg. Vol. 1. February-December 1876. Lond., 1876. (Continuation of St. Martin's Magazine.)
- Telephone Engineer. M. Vol. 1-date. Chic., 1909-date.
- Telephone Magazine. M. Vol. 1-26, no. 2. Chic., 1893-August 1905. (Vol. 1-11 title reads Electrical Engineering. Vol. 12-14 title reads Electrical Engineering and Telephone Magazine. Incorporated with Telephony in September 1905.)
- Telephony. M. Vol. 2, 4-6, 9-date. Chic., 1901, 1902-1903, 1905-date. (In September 1905 incorporated Telephone Magazine. In September 1908 incorporated American Telephone Journal and Sound Waves. In July 1910 volume number changed to 59.)
- Terrestrial Magnetism and Atmospheric Electricity. Q. Vol. 1-date. Baltimore, Md., 1896-date.

- Textile World. M. Vol. 8-15. Bost., 1895-1898. (In April 1903 Textile World and Textile Record consolidated and formed Textile World Record.)
- Textile World Record. M. Vol. 25-date. Bost., 1903-date. (Continuation of Textile World.)
- Timber Trades Journal. W. Vol. 66-date. Lond., 1909-date.
- Tonindustrie Zeitung. Tri-W. Vol. 32-date. Ber., 1908-date.
- Tokyo Imperial University. College of Science. Journal. Irreg. Vol. 1-date. Tokyo, 1887-date.
- Traction and Transmission. M. Vol. 1-10. Lond., 1901-1904. Monthly supplement to Engineering.
- Tramway and Railway World. M. Vol. 12, 14-date. Lond., 1902-date.
- Transmitter. S-M. Vol. 13, nos. 1-8, 10-12; Vol. 14-16; Vol. 17, nos. 1-9, 11-12; Vol. 18, nos. 1-5, 7, 9-13; Vol. 19-date. Sydney-Lond., 1903-date.
- Transvaal Institute of Mechanical Engineers. Journal. M. Vol. 3, no. 8-Vol. 5; 7-9, no. 4. Johannesburg, March 1905-November 1910. (Continuation of Mechanical Engineers' Association of the Witwatersrand. In February 1911 consolidated with South African Association of Engineers.)
- Traveling Engineers' Association. Proceedings of the annual convention. Y. 1st-date. Buffalo, N. Y., 1893-date.
- Treasury Construction Society. Proceedings of the annual meeting. Y. No. 3. n. p., 1911.
- Tschermak Mineralogische. See Mineralogische Mittheilungen.
- Turbine. S-M. Vol. 1-date. Ber., 1904-date.
- L'Union des Charbonnages Mines et Usines Metallurgique. Bulletin. Irreg. Vol. 11, no. 5-10; Vol. 12-14, 16-date. Liège, 1879-1882, 1884-date.
- United States Association of Charcoal Iron Workers. Journal. Bi-M. Vol. 1-9, no. 1. Phil., 1880-1891.
- United States Miller. M. Vol. 15-18. Milwaukee, 1890-1893.
- United States Nautical Magazine and Naval Journal. M. Vol. 1-7. N. Y., 1855-1858. (Vol. 1-2 title reads Monthly Nautical Magazine and Quarterly Review.)
- United States Naval Institute. Proceedings. Q. Vol. 1-date. Annapolis, Md., 1874-date. (Vol. 1-4 title reads Papers and Proceedings.) General index. Vol. 1-27. 1874-1901. Baltimore, 1902.
- Universal Engineer. M. Vol. 7-date. N. Y., 1908-date.
- Uppsala University. Geological Institution. Bulletin. Irreg. Vol. 1-date. Upsala, 1892-date. Index. Vol. 1-10. 1893-1910. Upsala, 1910.
- Van Nostrand's Electric Engineering Magazine. Vol. 1-35. N. Y., 1869-1886. (In 1887 consolidated with American Railroad Journal and formed Railroad and Engineering Journal.)
- Vassar Brothers Institute. Bulletin. No. 1-2. Poughkeepsie, N. Y., 1906.
- Transactions. Y. Vol. 3-7. Poughkeepsie, N. Y., 1884-1896.
- Verein der Deutsche Zucker-Industrie. Zeitschrift. M. Vol. 59-date. Ber., 1909-date.
- Verein Deutscher Ingenieure. Wochenschrift. 1878-1883. Ber., 1878-1883. Inhaltsverzeichnis. 1877-1883. Ber., 1884.

- Zeitschrift. W. Vol. 1-3, 6-date. Ber., 1857-1859, 1862-date. Inhaltsverzeichnis. Vol. 38-47. 1894-1903. Ber., 1904.
- Verein zur Beförderung des Gewerbflusses. Verhandlungen. (10 numbers yearly.) Vol. 89-date. Ber., 1910-date.
- Vermont Engineer. See Association of Vermont Engineers.
- Victorian Institute of Engineers. M. Proceedings. Vol. 6, no. 12; Vol. 9-date. Melbourne, 1905, 1908-date.
- Virginia Manufacturer. W. Vol. 2. Buchanan, Va., 1891.
- Virginias. M. Vol. 1-6. Staunton, Va., 1880-1885.
- Vulkan. S-M. Vol. 9-date. Frankfurt-a-Main, 1909-date.
- Weltall. S-M. Vol. 6. Ber., 1905-1906.
- Werkstattstechnik. M. Vol. 3-date. Ber., 1909-date.
- West of Scotland Iron and Steel Institute. Journal. Y. Vol. 1-date. 1892-date. Glasgow, 1894-date.
- West Virginia Coal Mining Institute. Proceedings. Y. 1908-date. Fairmont, W. Va., 1908-date.
- West Virginia Mining Association. Annual meeting. Y. 1910. Washington, D. C., 1910.
- Western Association of Technical Chemists and Metallurgists. Western Chemist and Metallurgist. Vol. 1-6. Denver, Colo., 1905-1910. (Ceased publication December 1910 and Society no longer exists.)
- Western Chemist and Metallurgist. See Western Association of Technical Chemists and Metallurgists.
- Western Electrician. W. Vol. 1-43. July 1887-October 1908. Chic., 1887-1908. (Combined with Electrical Review, New York, November 1908 and continued as Electrical Review and Western Electrician.)
- Western Gas Association. Proceedings of the annual meeting. Y. 10th-28th. St. Louis, Mo., 1887-1906.
- Western Mining World. See Mining and Engineering World.
- Western Railway Club. Official proceedings. (9 numbers yearly.) Vol. 1-9, no. 6; Vol. 9, no. 8-date. Chic., 1888-date.
- Western Society of Engineers. Journal. Bi-M. Vol. 1-date. Chic., 1896-date.
- Western Telephone Journal. M. Vol. 8-9, no. 5; Vol. 10-13, no. 5; Vol. 14, no. 1-3, 5-6; Vol. 15, no. 1-2, 6; Vol. 16, no. 1, 3-6; Vol. 17, no. 1. Vinton, Iowa, 1906-August 1910. (Consolidated with Telephone Engineer in September 1910.)
- Westminster Review. Vol. 3, 21. Lond., 1825, 1834.
- Wisconsin Academy of Sciences, Arts and Letters. Transactions. Vol. 8. 1888-1891. Madison, Wis., 1892.
- Wisconsin Engineer. S-M. Vol. 3-4, 6-10, 12-date. Madison, Wis., 1899-1900, 1901-1905, 1907-date.
- Wisconsin Gas Association. Proceedings of the annual meeting. Y. 1st-7th, 9th-date. v. p., 1902-1908, 1910-date.
- Wisconsin University. Bulletin. Engineering series. Irreg. Vol. 1-date. Madison, Wis., 1896-date.
- Bulletin. Science series. Vol. 1-date. Madison, Wis., 1901-date.
- Witwatersrand Mining and Metallurgical Review. M. Nos. 1-21. Johannesburg, 1890-1891. (Incorporated with South African Mining Journal in 1891.)
- Wood Preservers' Association. Proceedings of the annual meeting. Y. No. 2-date. Laramie, Wyo., 1906-date. (No Proceedings issued for 1908.)

- Woodcraft. M. Vol. 1-date. Cleveland, O., 1904-date. (Vol. 1-3 title reads Pattern Maker.)
- Worcester Polytechnic Institute. Journal. Vol. 1-date. Worcester, Mass., 1897-date.
- World's Progress. M. Vol. 1, nos. 4-8, 10-11; Vol. 2, no. 12-Vol. 5, no. 10. April-August, October-November 1905, December 1906-October 1909. Wash., 1905-1909.
- Yale Scientific Monthly. (9 numbers yearly.) Vol. 9-14, no. 9; Vol. 15, no. 2-date. New Haven, 1902-date.
- Zeitschrift für Analytische Chemie. Autoren- und Sach-Register. Vol. 1-10. 1862-1871. Wiesbaden, 1872. Autoren- und Sach-Register. Vol. 11-20. 1872-1881. Wiesbaden, 1881. Autoren- und Sach-Register. Vol. 21-30. 1882-1891. Wiesbaden, 1894.
- Zeitschrift für Angewandte Chemie. W. Vol. 1-2, 4-date. Ber., 1887-1888, 1890-date. (Vol. 1 title reads Zeitschrift für die Chemische Industrie.)
- Zeitschrift für Angewandte Elektrizitätslehre. M. Vol. 1-4. Mun., 1879-1882. (Continued as Centralblatt für Elektrotechnik.)
- Zeitschrift für Anorganische Chemie. Irreg. Vol. 1-date. Lpz., 1892-date. Index. Vol. 28-30 in Vol. 30. Lpz., 1902. Index. Vol. 31-33 in Vol. 33. Lpz., 1903. Index. Vol. 34-36 in Vol. 36. Lpz., 1903. Index. Vol. 37-39 in Vol. 39. Lpz., 1904. Index. Vol. 40-42 in Vol. 42. Lpz., 1904. Index. Vol. 43-45 in Vol. 45. Lpz., 1905. Index. Vol. 46-48 in Vol. 48. Lpz., 1906. Index. Vol. 49-51 in Vol. 51. Lpz., 1906. Index. Vol. 52-54 in Vol. 54. Lpz., 1907. Index. Vol. 55-57 in Vol. 57. Lpz., 1908. Index. Vol. 58-60 in Vol. 60. Lpz., 1908. Index. Vol. 61-63 in Vol. 63. Lpz., 1909. Index. Vol. 64-66 in Vol. 66. Lpz., 1910. Index. Vol. 67-69 in Vol. 69. Lpz., 1911.
- Zeitschrift für Beleuchtungswesen, Heiz- und Lüftungs-Technik. Tri-M. Vol. 8-date. Ber., 1902-date.
- Zeitschrift für Bergrecht. Q. Vol. 14-15, 42-49. Konn, 1873-1874, 1902-1908.
- Zeitschrift für das Berg-, Hütten- und Salinenwesen in dem Preussischen Staate. Irreg. Vol. 1-date. Ber., 1854-date. Haupt-register. Vol. 1-25. 1853-1877. Ber., 1879. Inhaltsverzeichnis. Vol. 1-150. 1853-1902. Ber., 1903.
- Atlas. Irreg. Vol. 20-27, 29-52. Ber., 1872-1879, 1881-1904.
- Literatur. 1901-1903. Ber., 1901-1903.
- Statistischer Theil. Irreg. Vol. 20-22, 50-date. Ber., 1872-1873, 1902-date.
- Zeitschrift für das Gesamte Schiess- und Sprengstoffwesen. S-M. Vol. 3-date. Mun., 1908-date.
- Zeitschrift für das Gesamte Turbinenwesen. M. Vol. 4-date. Mun., 1907-date.
- Zeitschrift für die Gesamte Kälte-Industrie. M. Vol. 16-date. Ber., 1909-date.
- Zeitschrift für Elektrochemie und Angewandte Physikalische Chemie. S-M. Vol. 1-date. Halle, 1894-date. (Vol. 1 title reads Zeitschrift für Elektrotechnik und Elektrochemie. Vol. 2-9 title reads Zeitschrift für Elektrochemie.) Generalregister. Vol. 1 Namenverzeichnis. Vol. 1-10. 1894-1904. Halle, 1910. Generalregister. Vol. 2 Sachverzeichnis. Vol. 1-10. 1894-1904. Halle, 1911.

- Zeitschrift für Elektrotechnik. *See* Elektrotechnik und Maschinenbau.
- Zeitschrift für Elektrotechnik und Maschinenbau. W. Vol. 6, 8-date. Potsdam, 1903, 1905-date.
- Zeitschrift für Instrumentenkunde. M. Vol. 1-date. Ber., 1881-date. Beiblatt. Deutsche Mechaniker-Zeitung.
- Zeitschrift für Kleinbahnen. M. Vol. 2, 9-date. Ber., 1895, 1902-date.
- Zeitschrift für Praktische Geologie. M. Vol. 1-date. Ber., 1893-date. General-register. Vol. 1-10. 1893-1902. Ber., 1903.
- Beiblatt. Bergwirtschaftliche Mitteilungen. M. Vol. 1-date. Ber., 1910-date. (Bound with Zeitschrift für Praktische Geologie.)
- Zentral-Organ für Petroleum-Industrie. *See* Allgemeine Oesterreichische Chemiker- und Techniker-Zeitung.
- Zentralblatt für Chemie und Analyse der Hydraulischen Zemente. M. Vol. 1-date. Halle, 1910-date.
- Zentralblatt für Eisenhüttenwesen. M. Vol. 1-3. Ber., 1906-1908. (Ceased publication December 1908.)
- Zprávy Spolek Architektuv a Inženýru v Království Geském. *See* Technický Obzor.

DEPOSITORIES FOR TRANSACTIONS

Altoona Mechanics Library, Altoona, Pa.
 Armour Institute of Technology, Chicago, Ill.
 Atlantic Works, East Boston, Mass.
 Boston Public Library, Boston, Mass.
 Brooklyn Public Library, Brooklyn, N. Y.
 Brown & Sharpe Mfg. Co., Providence, R. I.
 Cambria Library Association, Johnstown, Pa.
 Carnegie Free Library, Allegheny, Pa.
 Cleveland Public Library, Cleveland, O.
 Colorado School of Mines, Golden, Colo.
 Commonwealth Edison Co., Chicago, Ill.
 Cornell University, Ithaca, N. Y.
 Detroit Public Library, Detroit, Mich.
 Grand Rapids Public Library, Grand Rapids, Mich.
 Grosvenor Library, Buffalo, N. Y.
 Harvard University, Cambridge, Mass.
 Iowa State College, Ames, Ia.
 John Crerar Library, Chicago, Ill.
 Kansas City Public Library, Kansas City, Mo.
 Leland Stanford Jr. University, Palo Alto, Cal.
 Lewis Institute, Chicago, Ill.
 Library of Congress, Washington, D. C.
 Lowell City Library, Lowell, Mass.
 Louisiana State University, Hill Memorial Library, Baton Rouge, La.
 McGill University, Montreal, Canada.
 Massachusetts Institute of Technology, Boston, Mass.
 Mechanics-Mercantile Library, San Francisco, Cal.
 Michigan Agricultural College, Lansing, Mich.
 Michigan School of Mines, Houghton, Mich.
 Montana State College of Agricultural and Mechanical Arts, Bozeman, Mont.
 New Hampshire College of Agriculture and Mechanic Arts, Durham, N. H.
 New Hampshire State Library, Concord, N. H.
 New Mexico College of Agricultural and Mechanical Arts, Mesilla Park, New Mex.
 New York Public Library, New York, N. Y.
 New York State Library, Albany, N. Y.
 Northwestern University, Evanston, Ill.
 Ohio State University, Columbus, O.
 Oregon Agricultural College, Corvallis, Ore.
 Patent Office Library, London, England.
 Pennsylvania State College, State College, Pa.
 Plainfield Public Library, Plainfield, N. J.
 Polytechnic Institute of Brooklyn, Brooklyn, N. Y.
 Pratt Institute Free Library, Brooklyn, N. Y.
 Princeton University, Princeton, N. J.
 Purdue University, Lafayette, Ind.
 Rutgers College, New Brunswick, N. J.
 St. Louis Mercantile Library Association, St. Louis, Mo.

Sheffield Scientific School, New Haven, Conn.
State University of Iowa, Iowa City, Ia.
State University of Kentucky, Lexington, Ky.
State University of North Dakota, University, N. D.
Steel Works Club, Joliet, Ill.
Stevens Institute of Technology, Hoboken, N. J.
Syracuse Public Library, Syracuse, N. Y.
Toledo Public Library, Toledo, O.
Tulane University, New Orleans, La.
United States Naval Experiment Station, Annapolis, Md.
University Library, Edinburgh, Scotland.
University of Cincinnati, Cincinnati, O.
University of Illinois, Urbana, Ill.
University of Kansas, Lawrence, Kan.
University of Leeds, Leeds, England.
University of Maine, Orono, Me.
University of Michigan, Ann Arbor, Mich.
University of Missouri, Columbia, Mo.
University of Nebraska, Lincoln, Neb.
University of Pennsylvania, Philadelphia, Pa.
University of Tennessee, Knoxville, Tenn.
University of Vermont, Burlington, Vt.
University of Wisconsin, Madison, Wis.
University of Wyoming, Laramie, Wyo.
Verein deutscher Ingenieure, Berlin, Germany.
Washington Steel and Ordnance Co., Washington, D. C.
Washington University, St. Louis, Mo.
Western Gas Construction Co., Fort Wayne, Ind.
Wilmington Institute, Wilmington, Del.
Worcester Free Public Library, Worcester, Mass.
Worcester Polytechnic Institute, Worcester, Mass.

CHARTER

CERTIFICATE OF INCORPORATION OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS AND THE MECHANICAL ENGINEERS' LIBRARY ASSOCIATION, TOGETHER WITH THE ORDER OF THE SUPREME COURT FOR THEIR CONSOLIDATION.

ORDER FOR CONSOLIDATION

At a Special Term, Part II, of the New York Supreme Court, held in and for the City and County of New York, in the County Court House, Borough of Manhattan, City of New York, on the 17th day of October, 1907.

PRESENT:

HONORABLE JAMES A. BLANCHARD,

Justice

IN THE MATTER OF THE PETITION
OF

THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS AND OF THE MECHANICAL ENGINEERS' LIBRARY ASSOCIATION, FOR AN ORDER CONSOLIDATING THEM INTO ONE CORPORATION.

Upon reading and filing the annexed petition of The American Society of Mechanical Engineers, verified on the 15th day of October, 1907; and the petition of The Mechanical Engineers' Library Association, verified the 15th day of October, 1907; and the agreement of consolidation, entered into between The American Society of Mechanical Engineers and The Mechanical Engineers' Library Association, on the 16th day of September, 1907; and the certificate of approval by the Chairman and Clerk of a meeting of the Fellows of The Mechanical Engineers' Library Association, duly acknowledged on the 15th day of October, 1907; and the certificate of approval by the Chairman and Clerk of a meeting of the members of The American Society of Mechanical Engineers, duly acknowledged on the 15th day of October, 1907;

And it appearing to the satisfaction of the Court from the aforesaid papers that The American Society of Mechanical Engineers and The Mechanical Engineers' Library Association are membership corporations, incorporated under the laws of the State of New York, for kindred purposes, being purposes for which a corporation may be formed under the Membership Corporations' Law of the State of New York; and that the said corporations have heretofore duly entered into an agreement for the consolidation of said corporations, which said agreement sets forth the terms and conditions of consolidation, the name

NOTE.—On December 15, 1910, the Secretary of State of the State of New York filed and recorded a supplemental certificate of incorporation which provides that the annual meeting and annual election of officers shall be held at such time and in such manner as shall be provided in the Constitution and By-Laws.

of the proposed corporation, the number of its Directors, the time of the annual election, and the names of the persons to be Directors until the first annual meeting;

That each of the said corporations has duly petitioned the Supreme Court for an order consolidating the two corporations, which said petition sets forth the agreement for consolidation, and a statement of all the property and liabilities, and the amount and sources of its annual income of each of said corporations; and that before the presentation of the said petition to this Court the agreement and the petition were approved by more than three-fourths of the votes legally cast at a meeting of said corporations, separately and specially called for that purpose, which approval, duly verified by the Chairman and Clerk of such meeting, is duly annexed to said petitions;

And the Court being satisfied that the said petition should be granted:

NOW, THEREFORE, Upon motion of Porter and Barnes, attorneys for the petitioners;

IT IS HEREBY ORDERED, That The American Society of Mechanical Engineers and The Mechanical Engineers' Library Association, as they now exist, be and the same hereby are, in accordance with Section VII, Article I of the Membership Corporations' Law of the State of New York, consolidated into one corporation, upon the following terms and conditions, to-wit—

That the two corporations be consolidated into one corporation; that all the property now owned by either of the two corporations be owned by the one consolidated corporation; that all the liabilities of either of the two corporations shall be assumed and paid by the one consolidated corporation; that the members of each of the two corporations shall become, without the payment of any initiation fees, or other dues, members in equal standing in the one consolidated corporation; that the consolidated corporation shall be governed by the Constitution, and By-Laws and Rules of The American Society of Mechanical Engineers, as the same exist at the time of the signing of this order; that the name of the new consolidated corporation shall be "THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS," that the number of the Directors of the new corporation shall be twenty-two; that the annual election shall be held on the first Tuesday of December of each year; that the names of the persons to be Directors of the corporation until the first annual meeting shall be:

FREDERICK R. HUTTON
WALTER M. McFARLAND
EDWARD N. TRUMP
ROBERT C. McKINNEY
ALEX DOW
P. W. GATES
J. W. LIEB, JR.
WM. H. WILEY
A. L. RIKER
GEO. M. BRILL
FRED J. MILLER

RICHARD H. RICE
WALTER LAIDLAW
FRANK G. TALLMAN
FREDERICK M. PRESCOTT
A. J. CALDWELL
G. M. BASFORD
F. W. TAYLOR
JOHN R. FREEMAN
AMBROSE SWASEY
JAMES M. DODGE
EDWIN REYNOLDS

ENTER

J. A. BLANCHARD

Justice of the Supreme Court

CONSTITUTION

NAME, OBJECT, AND GOVERNMENT

C1 The title of this Society is "The American Society of Mechanical Engineers."

C2 The object of the Society is to promote the Arts and Sciences connected with Engineering and Mechanical Construction. The principal means for this purpose shall be the holding of meetings for the reading and discussion of professional papers, and for social intercourse; the publication and distribution of its papers and discussions; and the maintenance of an Engineering Library.

C3 The Society shall be governed by this Constitution and by By-Laws and Rules in harmony therewith.

C4 The Society was organized as a Corporation under the laws of the State of New York, April 7, 1880. Its offices shall be located in the City of New York.

MEMBERSHIP

C5 Persons connected with the Arts and Sciences relating to Engineering or Mechanical Construction may be eligible for admission into the Society.

C6 The membership of the Society shall consist of Honorary Members, Members, Associates, and Juniors. Honorary Members, Members and Associates are entitled to vote and to hold office. Juniors shall not be entitled to vote nor to be officers of the Society, but shall be entitled to the other privileges of membership.

C7 Honorary Members, Members and Associates are entitled to vote on all questions before any meeting of the Society, in person or by proxy, given to a voting member. A proxy shall not be valid for a greater time than for six months.

C8 Honorary Members shall be persons of acknowledged professional eminence, and their number shall not exceed 25 at any time.

C9 A Member shall be thirty years of age or over. He must have been so connected with Engineering as to be competent, as a designer or as a constructor, to take responsible charge of work in his branch of engineering, or he must have served as a teacher of engineering for more than five years.

C10 An Associate shall be thirty years of age or over. He must have been so connected with some branch of engineering or science, or the arts, or industries, that the Council will consider him qualified to coöperate with engineers in the advancement of professional knowledge.

C11 A Junior shall be twenty-one years of age or over. He must have had such engineering experience as will enable him to

NOTE.—The rules of the Society adopted in 1880 were in force until 1884, when they received general revision by a committee whose report, distributed by letter-ballot, was adopted November 5, 1884. In December, 1894, a similar extensive revision was made under the direction of the Council, and in December, 1903, the present Constitution, By-Laws and Rules, formulated by a special committee, were adopted and went into effect.

fill a responsible subordinate position in engineering work, or he must be a graduate of an engineering school. A person who is over thirty years of age shall not be eligible to membership in the Society as a Junior.

C12 The rights and privileges of every Honorary Member, Member, Associate, and Junior shall be personal to himself, and shall not be transferable or transmissible by his own act or by operation of law.

ADMISSION

C13 Honorary Members shall be nominated by at least ten members of the Society. The grounds upon which the nomination is made shall be presented to the Council in writing.

C14 All applications for membership to the grades of Member, Associate, or Junior, shall be presented to the Council, which shall consider and act upon each application, assigning each approved applicant to the grade of membership to which, in the judgment of the Council, his qualifications entitle him. The name of each candidate thus approved by the Council shall, unless objection is made by the applicant, be submitted to the voting membership for election, by means of a letter-ballot.

C15 Associates or Juniors desiring to change their grade of membership shall make application to the Council in the same manner as is required in the case of a new applicant.

C16 Election to membership shall be by a sealed letter-ballot as the By-Laws shall provide. Adverse votes to the number of two per cent of the votes cast shall be required to defeat the election of an applicant for any grade of membership. The Council may, in its discretion, order a second ballot upon a defeated applicant, in which case adverse votes to the number of four per cent of the votes cast shall be required to defeat the election.

C17 The election of Honorary Members shall be by vote of the Council taken by letter-ballot, as provided in the By-Laws. One dissenting vote shall defeat such election.

C18 Each person elected, excepting Honorary Members, shall subscribe to this Constitution, and shall pay the initiation fee before he can be entitled to the rights and privileges of membership. If such person does not comply with this requirement within six months after notice of his election, he will be deemed to have declined election. The Council may, thereupon, declare his election void.

INITIATION FEES AND DUES

C19 The initiation fee for membership in each grade shall be as follows:

For Member	\$25.00
For Associate	25.00
For Junior	15.00

C20 A Junior, on promotion to any other grade of membership, shall pay an additional fee of \$10.

C21 The annual dues for membership in each grade shall be as follows:

For Member	\$15.00
For Associate	15.00
For Junior	10.00 for the

first six years of his membership and thereafter the same as for an Associate.

C 22 The Council may, in its discretion, permit any Member or Associate to become a Life Member in the same grade, by the payment at one time of an amount sufficient to purchase from the Equitable Life Assurance Society of New York, an annuity on the life of a person of the age of the applicant equal to the annual dues in his grade. Such Life Member shall not be liable thereafter for annual dues.

C 23 The Council shall have the power, by letter-ballot, to admit to Life Membership, without the payment of a life membership fee, any person who, for a long term of years, has been a Member or an Associate when, for special reasons, such procedure would in its judgment, promote the best interests of the Society, provided that notice of such proposed action shall have been given at a previous meeting of the Council. One dissenting vote shall defeat such admission.

SUSPENSIONS AND EXPULSIONS

C 24 Any Member, Associate, or Junior, who shall leave his annual dues unpaid for one year, shall not receive the volume of Transactions until such arrears are paid. Any Member, Associate, or Junior, who shall leave his dues unpaid for two years, shall, in the discretion of the Council, have his name stricken from the roll of membership, and shall cease to have any further rights as such.

C 25 The Council may refuse to receive the dues of any member of any grade, who shall have been adjudged by the Council to have violated the Constitution or By-Laws of the Society, or who, in the opinion of the Council by a two-thirds vote, shall have been guilty of conduct rendering him unfit to continue in its membership; and the Council may expel such person and remove his name from the list of members.

THE COUNCIL

C 26 The affairs of the Society shall be managed by a Board of Directors chosen from among its Members and Associates, which shall be styled "The Council." The Council shall consist of the President of the Society, who shall be the presiding officer, six Vice-Presidents, nine Managers, the Treasurer, and five Past-Presidents. Five members of the Council shall constitute a quorum for the transaction of business. The Secretary may take part in the deliberations of the Council, but shall not have a vote therein. The Chairman of the Finance Committee shall attend the meetings of the Council and take part in the discussion of financial questions, but shall not have a vote.

C 27 The five surviving Past-Presidents who last held the office shall be the members of the Council, with all the rights, privileges, and duties of the other members of the Council.

C 28 The Council thus constituted shall be the legal Trustee of the Society. All gifts or bequests not designated for a specific purpose shall be invested by the Council, and only the income therefrom may be used for current expenses.

C 29 Should a vacancy occur in the Council, or in any elective office except the Presidency, through death, resignation or other cause, the Council may elect a Member or Associate to fill the vacancy until the next annual election.

C 30 The Council shall regulate its own proceedings, and may by resolution delegate specific powers to an Executive Commit-

tee or to any one or more members of the Council. No act of the Executive Committee or of a delegate shall be binding until it has been approved by a resolution of the Council.

C 31 The Council shall present at the Annual Meeting of the Society a report verified by the President or Treasurer or by a majority of the members of the Council, showing the whole amount of real and personal property owned by the Society, where located, and where and how invested, and the amount and nature of the property acquired during the year immediately preceding the date of the report, and the manner of the acquisition; the amount applied, appropriated or expended during the year immediately preceding such date, and the purposes, objects or persons to or for which such applications, appropriations, or expenditures have been made; also the names and places of residence of the persons who have been admitted into membership in the Society during the last year, which report shall be filed with the records of the Society, and an abstract thereof shall be entered in the minutes of the proceedings of the Annual Meeting.

C 32 An act of the Council, which shall have received the expressed or implied sanction of the membership at the next subsequent meeting of the Society, shall be deemed to be the act of the Society, and shall not afterwards be impeached by any member.

C 33 The Council may, by a two-thirds vote of the members present, declare any elective office vacant, on the failure of its incumbent for one year, from inability or otherwise, to attend the Council meetings, or to perform the duties of his office, and shall thereupon appoint a Member or Associate to fill the vacancy until the next Annual Meeting. The said appointment shall not render the appointee ineligible to election to any office.

OFFICERS

C 34 At each Annual Meeting there shall be elected from among the Members and Associates:

A President to hold office for one year.

Three Vice-Presidents, each to hold office for two years.

Three Managers, each to hold office for three years.

A Treasurer, to hold office for one year.

C 35 The election of officers shall be by sealed letter-ballot, as the By-Laws shall provide.

C 36 The term of all elective officers shall begin on the adjournment of the Annual Meeting of the Society. Officers shall continue in their respective offices until their successors have been elected and have accepted their offices.

C 37 A President, Vice-President, or Manager shall not be eligible for immediate re-election to the same office at the expiration of the term for which he was elected.

C 38 The Council, at its first meeting after the Annual Meeting of the Society, shall appoint a person of the grade of Member to serve as Secretary of the Society for one year, subject to removal for cause by an affirmative vote of members of the Council, at any time after one month's written notice has been given him to show cause why he should not be removed, and he has been heard in his own defense, if he so desires. The Secretary shall receive a salary which shall be fixed by the Council at the time of his appointment,

The Council may also in its discretion appoint a person of the grade of Member to be an Honorary Secretary of the Society for a term not to exceed one year, but he may be reappointed from year to year. He shall perform such duties as may be assigned to him by the Council which are in conformity with the Constitution and By-Laws, and with or without compensation as the Council may direct.

C 39 The President, Secretary, and Treasurer shall perform the duties legally or customarily attaching to their respective offices under the laws of the State of New York, and such other duties as may be required of them by the Council.

C 40 A vacancy in the office of President shall be filled by the Vice-President, who is senior by age.

MEETINGS

C 41 The Society shall hold two meetings in each year. The Annual Meeting shall begin in New York City on the first Tuesday in December, and a Semi-Annual Meeting shall be held at such time and place as the Council may appoint. Fifty Members and Associates shall constitute a quorum for the transaction of business.

C 42 Special meetings of the Society may be called at any time at the discretion of the Council, or shall be called by the President upon the written request of fifty members entitled to vote, the notices for such meetings to state the business for which such meeting is called and no other business shall be entertained or transacted at that meeting.

C 43 The expenses of all meetings of the Society and of any group or section thereof, shall be arranged in accordance with such By-Laws and Rules as the Council may from time to time adopt, provided, however, that nothing in this section shall be construed to authorize the Council to make any increase in the annual dues of members in any grade.

C 44 Any appropriation recommended by the Society at a meeting, shall not take effect until it has been approved by the Council.

C 45 Every question which shall come before a meeting of the Society or of the Council or a Committee, shall be decided by a majority of the votes cast, unless otherwise provided in this Constitution or the By-Laws or the Laws of the State of New York. The Council may order the submission of any question to the membership for discussion by letter-ballot. Any meeting of the Society at which a quorum is present, may order the submission of any question to the membership for discussion by letter-ballot.

STANDING COMMITTEES

C 46 The Standing Committees of the Society to be appointed by the President shall be:

- Finance Committee.
- Committee on Meetings.
- Publication Committee.
- Membership Committee.
- Library Committee.
- House Committee.
- Research Committee.
- Public Relations Committee.

C 47 There shall be a John Fritz Medal Committee of four members appointed as provided in the By-Laws.

C 48 The Annual Committees shall be:

An Executive Committee, appointed by the Council;

A Nominating Committee, appointed by the President;

Tellers as required by the By-Laws, appointed by the President.

C 49 Special Nominating Committee:

Twenty or more members entitled to vote may constitute themselves a Special Nominating Committee, with the same powers as the Annual Nominating Committee.

C 50 Professional Committees:

The Council shall have power to appoint, upon a recommendation of the Society at a general meeting, or upon its own initiative, such Professional Committees as it may deem desirable, to investigate, consider, and report upon subjects of engineering interest. Reports of such committees may be accepted by the Society and printed in the Transactions, but shall not be approved or adopted as the action of the Society. Any proposed expenses of such committees must be authorized by the Council before they are incurred.

C 51 Each committee shall perform the duties required of it in the By-Laws, or assigned to it by the Council. The Secretary of the Society shall be the Secretary of each of the Standing Committees.

C 52 The Council may at any time, in its own discretion, remove any or all members of any committee, except a Nominating Committee; and the vacancy arising from this or from any other cause, shall be filled by appointment by the President, except a vacancy in the Executive Committee, which shall be filled by the Council.

SECTIONS OF THE SOCIETY

C 53 The Council may, in its discretion, authorize the organization of sections or groups of any or all grades of membership, for professional or scientific purposes which are in harmony with the Constitution and By-Laws of this Society. Such sections or groups may in the discretion of the Council, be geographical or professional, and shall have such powers, and act under such rules and regulations as the Council may from time to time prescribe.

TRANSACTIONS

C 54 The official record of technical papers and discussion shall be known as the Transactions of the Society, and shall be published under the direction of the Council. There may be included therein, the annual report of the Council, reports of committees, and business records of the Society.

C 55 The Society shall claim no exclusive copyright to any papers read at its meetings, or any reports or discussions thereon, except in the matter of their official publication under the Society's imprint as its Transactions. The policy of the Society shall be to give the professional and scientific papers read before it the widest circulation possible, with the view of making the work of the Society known, encouraging Engineering progress, and extending the professional reputation of its members.

C 56 The Society shall not be responsible for statements or opinions advanced in papers or in discussions at its meetings.

Matters relating to politics or purely to trade shall not be discussed at a meeting of the Society, nor be included in the Transactions.

C 57 The Society shall not approve or adopt any standard or formula, or approve any engineering or commercial enterprise. It shall not allow its imprint or name to be used in any commercial work or business.

AMENDMENTS TO THE CONSTITUTION

C 58 At any semi-annual meeting of the Society any member may propose in writing an amendment to this Constitution. Such proposed amendment shall not be voted at that meeting, but shall be open to discussion and to such modification as may be accepted by the proposer. The proposed amendment shall be mailed in printed form by the Secretary to each member of the Society entitled to vote, at least sixty days previous to the next annual meeting, accompanied by comment by the Council, if it so elects. At that annual meeting such proposed amendment shall be presented for discussion and final amendment, and shall subsequently be submitted to all members entitled to vote, provided that twenty votes are cast in favor of such submission. The final vote on adoption shall be by sealed letter-ballot, closing at 12 o'clock noon, on the first Monday of March following.

C 59 The letter-ballot, accompanied by the text of the proposed amendment, shall be mailed by the Secretary to each member of the Society entitled to vote, at least thirty days previous to the closure of the voting. The ballots shall be voted, canvassed, and announced as provided in the By-Laws. The adoption of the amendment shall be decided by a majority of the votes cast. An amendment shall take effect on the announcement of its adoption by the Presiding Officer of the semi-annual meeting next following the closure of the vote.

AMENDMENTS TO BY-LAWS AND RULES

C 60 For the further ordering of the affairs of the Society, the Council may, by a two-thirds vote of its members present, amend the By-Laws in harmony with this Constitution, provided that a written notice of such proposed amendment shall have been given at the previous regular meeting of the Council; and provided further that the Secretary shall have mailed to each member of the Council a copy of such proposed amendment, at least thirty days in advance of the meeting of the Council at which action is to be taken. The amendment shall take effect immediately on its passage by the Council. The Secretary shall at once mail a copy of such amendment to the members of all grades.

C 61 The Council may, by a majority vote of the members present at any meeting, establish, amend, or annul Rules for the conduct of the business affairs of the Society; for the ordering and conduct of its professional or business meetings, and for the guidance of its committees in their work and reports; provided that such Rules are in harmony with the Constitution and By-Laws of the Society.

CONSTITUTION GOES INTO EFFECT

C 62 This Constitution shall supersede all previous Rules of the Society, and shall go into effect on the announcement by the Presiding Officer of its adoption.

BY-LAWS

CANDIDATES FOR MEMBERSHIP

B 1 A candidate for admission to the Society as a Member or as an Associate must make application on a form approved by the Council, upon which he shall write a statement giving a complete account of his qualifications and engineering experience, and an agreement that he will, if elected, conform to the Constitution, By-Laws and Rules of the Society. He must refer to at least five Members or Associates to whom he is personally known.

B 2 Applications for membership from Engineers who are not resident in the United States or Canada, and who may be so situated as not to be personally known to five members of the Society, as required in the foregoing paragraph, may be recommended for ballot by five members of the Council, after sufficient evidence has been secured to show that in their opinion the applicant is worthy of admission to the grade which he seeks.

B 3 A candidate for admission to the Society as a Junior must make application in the same manner as provided for Members, except that he must refer to not less than three Members or Associates to whom he is personally known.

B 4 References shall not be required of candidates for Honorary Membership.

B 5 The references for each candidate for admission to the Society shall be requested to make a confidential communication to the Membership Committee, setting forth in detail such information, personally known to the referee, as shall enable the Council to arrive at a proper estimate of eligibility of the candidate for admission to the Society.

ELECTION OF MEMBERS

B 6 The Secretary shall mail, at least thirty days in advance of each annual or semi-annual meeting, to each member entitled to vote, a ballot stating the names and the respective grades of the candidates for membership in the Society which have been approved by the Council, and the time of the closure of voting. The voter shall prepare his ballot by crossing out the name of any candidate rejected by him, and shall enclose said ballot in an envelope and seal the same; he shall then enclose said envelope in a second envelope marked "Ballot for Members," and seal the same, and he shall then write his own name thereon for identification. The ballot thus prepared and enclosed shall be mailed or delivered unopened to the Tellers of Election. The Secretary shall certify to the competency and the signature of all voters. A ballot without the autographic endorsement of the voter written on the outer envelope is defective, and shall be rejected by the Tellers of Election.

B 7 The voting for the election of members shall close at 12 o'clock noon, five days in advance of the day on which the annual or semi-annual meeting begins. The Tellers of Election shall first open and destroy the outer envelopes, and shall then

open the inner envelopes and canvass the ballots, and certify the result to the President or Presiding Officer of the Society, at the first session of the current meeting of the Society. The Tellers shall not receive any ballot after the stated time for the closure of the voting.

B 8 The names of those persons elected to membership, with their respective grades, shall be embodied in a written report, signed by the Tellers, and presented to the next meeting of the Society. The President shall then declare them duly elected to membership in the Society. The Tellers may, through the Secretary, in advance of any meeting, advise each candidate of the result of the canvass of the votes in his case. The names of applicants who are not elected shall neither be announced nor recorded in the Transactions.

B 9 The endorsers of an applicant who has not been elected, may, with his consent, present to the Council a written request for a resubmission of his name to ballot. The Council may, in its discretion, by a three-fourths vote of the members present, order the name of the applicant placed on the next ballot for members.

B 10 Election to Honorary Membership shall be by letter-ballot of the Council. A notice of such proposed election shall be mailed by the Secretary to each member of the Council at least sixty days in advance of the date set for the closure of such election.

B 11 Each person elected to membership, except an Honorary Member, must subscribe to the Constitution, By-Laws and Rules of the Society and pay the initiation fee before he can receive a certificate of membership in the Society. Resignations from membership shall be presented to the Council for action.

ELECTION OF OFFICERS

B 12 The Secretary shall mail on or before the last Thursday in October of each year to each member entitled to vote a ballot stating the names of the candidates for the several offices falling vacant, and the time of the closure of the voting. The voter shall prepare his ballot by crossing out the name of any candidate or candidates rejected by him, and may write in the name of any eligible member of the Society. The voter shall enclose said ballot in an envelope and seal the same. He shall then enclose the sealed envelope in a second envelope marked "Ballot for Officers," seal the same, and shall then write his name thereon for identification. The ballot thus prepared and enclosed shall be mailed or delivered unopened to the Tellers of Election. The Secretary shall certify to the competency and signature of all voters. A ballot without the autographic endorsement of the voter written on the outside envelope is defective, and shall be rejected by the Tellers of Election. A ballot which contains more names than there are offices to be filled is thereby defective, and shall be rejected by the Tellers.

B 13 The voting for the election of officers shall close at ten o'clock in the forenoon on the first Tuesday in December in each year. The Tellers shall not receive any ballot after the stated time for the closure of the voting. The Tellers of Election shall first open and destroy the outer envelopes and shall then open the inner ones, canvass the ballots and certify the result to the

President or Presiding Officer at the first session of the current meeting of the Society. The Presiding Officer shall then announce the candidates having the greatest number of votes for their respective offices, and declare them elected for the ensuing year.

B 14 The names of the candidates proposed by the Nominating Committee or Committees, and the respective offices for which they are candidates, shall be printed in separate lists on the same ballot sheet, each list of candidates to be printed under the names of the members of the particular committee which proposed it.

B 15 In case of a tie in the vote for any officer, the President or, in his absence, the Presiding Officer, shall cast the deciding vote.

B 16 The initiation fee and the annual dues for the first year shall be due and payable on the first day of the month following the date of election of a Member, Associate or Junior. The annual dues for each ensuing year shall be due and payable in advance on the corresponding day in each year thereafter. Upon the payment of the initiation fee and the annual dues for the first year, the person elected shall be entitled to the rights and privileges of membership in the grade to which he was elected. The date of payment of a member's annual dues may be changed to the first day of any other month, and a pro rata adjustment of the dues made, by application to the Secretary.

B 17 A Member, Associate or Junior in arrears for dues for one year, on the first day of October previous to the Annual Meeting, shall not be entitled to vote, or to receive the Transactions or the publications issued by the Society thereafter until such dues have been paid. Should the arrears for dues or otherwise be for more than two years, the name of such person shall be presented to the Council for such action as it deems advisable under C 24. Should the right to vote, or to receive the publications of the Society be questioned, the books of the Society shall be conclusive evidence.

B 18 The Council at any meeting may, in its discretion, permanently remit the dues of any Member of the Society who has paid thirty years' dues, or who shall have reached the age of seventy years after having paid twenty-five years' dues, provided that notice of such proposed action shall have been given at a previous meeting of the Council and the Committee on Membership shall have concurred in recommending that this action be taken. The Council may, in its discretion, restore to membership any person dropped from the rolls for non-payment of dues, or otherwise, upon such terms and conditions as it may at the time deem best for the interests of the Society.

FINANCIAL ADMINISTRATION

B 19 The Council, at its first meeting in each fiscal year, shall consider the recommendations of the Finance Committee concerning the expenditure necessary for the work of the Society during that year. The apportioning of the work of the Society among the various Standing and other Committees shall be on a basis approved by the Council and in harmony with the Constitution and By-Laws. The appropriations approved by the Council, or so much thereof as may be required for the work of the

Society, shall be expended by the Secretary acting as Business Manager, under the direction of the various Committees of the Society, and all bills against the Society for such expenditure shall be certified by the Secretary and shall then be sent to the Finance Committee for audit. Money shall not be paid out by any officer or employee of the Society except upon vouchers duly audited by the Finance Committee.

THE JOURNAL

B 20 The Council shall institute a monthly publication to be called "The Journal," which shall be under the management of the Secretary, who shall act under the general supervision of the Publication Committee, subject to approval by the Council as to the policy thereof and the expenditures therefor. The annual subscription price of The Journal to each member is two dollars and is included in the annual dues of such member.

COMMITTEES

B 21 The President within one month after the Annual Meeting shall fill all vacancies in the Standing Committees by appointment from the membership of the Society.

Each of the Standing and the Annual Committees, shall, at their first meeting after the Annual Meeting, elect a Chairman to serve for one year. The President shall appoint the Chairman of each Professional Committee. A member of a Standing Committee, whose term of office has expired, shall continue to serve until his successor shall have been appointed.

FINANCE COMMITTEE

B 22 The Finance Committee shall consist of five Members or Associates. The term of office of one member of the Committee shall expire at the end of each Annual Meeting. This Committee shall, under the direction of the Council, have a supervision of the financial affairs of the Society, including the books of account. The Committee may cause the accounts of the Society to be audited and approved annually by a chartered or other competent public accountant. The Committee shall hold monthly meetings for the audit of bills and such other business as shall come before it and shall deliver to the Secretary for presentation to the Council at the end of each fiscal year, a report of the financial condition of the Society for the past year, and also shall present therewith a detailed estimate for the probable income and expenditure of the Society for the following twelve months. It shall make recommendations to the Council as to investments, and, when called upon by the Council, advise upon financial questions. It shall have charge of the making of all contracts and other obligations to pay money in the Society's work and the ordering of all expenditures thereunder.

COMMITTEE ON MEETINGS

B 23 The Committee on Meetings shall consist of five persons who may be members of any grade. The term of office of one member of the Committee shall expire at the end of each Annual Meeting. It shall be the duty of the Committee to procure professional papers, to pass upon their suitability for presentation,

and to suggest topical subjects for discussion at the annual and semi-annual meetings. The Committee may refer any paper presented to the Society to a person or persons, especially qualified by theoretical knowledge or practical experience, for their suggestions or opinions as to the suitability of the paper for presentation. Papers from non-members shall not be accepted except by unanimous vote of the Committee.

The Committee shall arrange the program, and shall have general charge of the entertainments to be provided for the members and guests for the above meetings. It shall prohibit the distribution or exhibition at the headquarters or at the places of the above meetings of all advertising circulars, pamphlets or samples of commercial apparatus or machinery. At the end of each fiscal year, the Committee shall deliver to the Secretary for presentation to the Council, a detailed report of its work.

PUBLICATION COMMITTEE

B 24 The Publication Committee shall consist of five Members or Associates. The term of office of one member shall expire at the end of each Annual Meeting. The Committee shall review all papers and discussions which have been presented at the meetings, and shall decide what papers and discussions, or parts of the same, shall be printed in the Transactions of the Society. The committee shall have the supervision of the monthly publication of the Society known as "The Journal." The Committee will be expected to publish all such data as will be of assistance to engineers or investigators in their work. At the end of each fiscal year the Committee shall deliver to the Secretary for presentation to the Council, a detailed report of its work.

MEMBERSHIP COMMITTEE

B 25 The Membership Committee shall consist of five Members or Associates. The term of office of one member of the Committee shall expire at the end of each Annual Meeting. It shall be the duty of this Committee:

- To meet monthly to receive and scrutinize all applications for membership to the Society:

- To send to each voting member the name, qualifications, engineering experience, and references, of each applicant, together with extracts from the Constitution and By-Laws relating to membership:

- To seek further information as to the qualifications of an applicant, whose evidence of eligibility is not clear to the Committee:

- To report to each session of the Council the names of all applicants under consideration, together with the action of the Committee on each.

The Committee shall at once destroy all correspondence in relation to each applicant when his name has been placed on the ballot by order of the Council, or upon the withdrawal of the application.

LIBRARY COMMITTEE

B 26 The Library Committee shall consist of five persons who shall be Members, Associates or Juniors. The term of office of one member of the Committee shall expire at the end of each

Annual Meeting. It shall be the duty of the Library Committee to coöperate with similar committees of the American Institute of Electrical Engineers and the American Institute of Mining Engineers in the care and development of a library. At the end of each fiscal year the Committee shall deliver to the Secretary a detailed report of its work.

HOUSE COMMITTEE

B 27 The House Committee shall consist of five persons who shall be Members, Associates, or Juniors. The term of office of one Member of the Committee shall expire at the end of each Annual Meeting. It shall be the duty of the House Committee to have the care, management and maintenance of the rooms of the Society and furnishings, the historical relics, the paintings, and objects of art, and to recommend to the Council suitable regulations for their care and use. At the end of each fiscal year the Committee shall deliver to the Secretary a detailed report of its work.

EXECUTIVE COMMITTEE

B 28 The Council shall appoint from its members an Executive Committee to act for the Council during the interval between its sessions. The Committee shall make a report of its acts to each session of the Council for approval. The Secretary may take part in the deliberations of the Executive Committee, but shall not have a vote therein.

NOMINATING COMMITTEES

B 29 A Nominating Committee of five Members, not members of the Council, shall be appointed by the President within three months after he assumes office. It shall be the duty of this Committee to send to the Secretary, on or before September 15th, the names of consenting nominees for the elective offices next falling vacant under the Constitution. Upon the request of any Member or Associate, the Secretary shall furnish to the applicant the names of such nominees. The names of the nominees proposed by the Committee shall be published in the next issue of The Journal.

B 30 A Special Nominating Committee, if organized, shall, on or before October 20th, present to the Secretary the names of the candidates nominated by it for the elective offices next falling vacant under the Constitution, together with the written consent of each.

JOHN FRITZ MEDAL COMMITTEE

B 31 The John Fritz Medal Committee shall consist of four persons of the grade of Member, to be appointed by the Council. The term of office of one member of this Committee shall expire at the end of each Annual Meeting. The duty of this Committee shall be to represent the Society in the Board of Trustees of the John Fritz Medal Fund Corporation.

TRUSTEE UNITED ENGINEERING SOCIETY

B 32 The Council shall, previous to January 1st of each year, elect a trustee to serve for a term of three years on the Board of Trustees of the United Engineering Society. No trustee shall be eligible for more than two terms consecutively.

REPRESENTATIVE DELEGATES

B 33 The Council may, in its discretion, appoint a member or members of the Society, or other person or persons, to represent it at meetings of Societies of kindred aim or at public functions. Such delegates shall be designated as "Honorary Vice-Presidents," and their duties shall terminate with the occasion for which they were appointed.

TELLERS

B 34 The President shall, on or before the last Thursday in October of each year, appoint three Tellers of Election of Officers, whose duty shall be to canvass the votes cast, and certify the same to the President or Presiding Officer at the first session of the Annual Meeting. Their term of office shall expire when their report of the canvass has been presented and accepted.

B 35 The President, within one month after assuming office, shall appoint three Tellers of Election of members to serve for one year, whose duties shall be to canvass the votes cast for members during the year, and to certify the same to the President. They shall notify candidates through the Secretary of the results of such election.

B 36 Ballots for an amendment to the Constitution shall be canvassed and announced in the same manner as the ballots for officers of the Society. The President shall appoint three Tellers to canvass any letter-ballots which shall be ordered by the Council or by the Society and to certify the same to the President, or the Presiding Officer.

MEETINGS

B 37 The Annual Meeting shall begin in the City of New York on the first Tuesday in December and continue from day to day as the Council may direct.

The Annual Business Meeting of the Society shall be held on the Wednesday following the first Tuesday of December.

The Semi-Annual Meeting shall be held in such place and begin on such a day as the Council may direct, and continue from day to day.

The Semi-Annual Business Meeting of the Society shall be held immediately preceding the first professional session of the Semi-Annual Meeting.

Professional meetings of the Society for the reading and discussion of papers and for topical discussions may be held at such times and places as the Council may direct.

Announcements of all meetings of the Society shall be published in the Journal.

A notice of each Annual and Semi-Annual Meeting and each Annual and Semi-Annual Business Meeting of the Society shall be mailed by the Secretary to each member in each grade not less than thirty days before the date of that meeting and at least thirty days before each Special Business Meeting.

SECRETARY

B 38 The Secretary of the Society shall be the Secretary to the Council, and also to each of the Standing Committees.

The Secretary shall, under the supervision of the Finance Committee, have charge of the Books of Account of the Society.

He shall make and collect all bills against members or others.

He shall have charge of all bills against the Society, shall keep an account of the same, and shall present them in proper form to the Finance Committee for audit.

All funds received by any person for the Society, shall be delivered to the Secretary. He shall immediately enter them in the Books of Account, and shall immediately deposit such funds as he receives, to the credit of the Society, in a bank to be designated by the Council.

TREASURER

B 39 The Treasurer shall make payments only on the audit of the Finance Committee, or upon the direction of the Council, by resolution of that body. He shall furnish a bond for the faithful performance of his duties to such amount as the Council may require, such bond to be procured from an incorporated Guarantee Company, at the expense of the Society.

TITLES, EMBLEMS, CERTIFICATES

B 40 Each Member, Associate, and Junior shall, subject to such rules as the Council may establish, be entitled, on request, to a certificate of membership, signed by the President and Secretary of the Society. Every such certificate shall remain the property of the Society, and shall be returned to it on demand of the Council.

B 41 Each proxy authorizing a person to vote for an absent member, shall be signed by such absent member, with an attesting witness, and be submitted to the Secretary for verification of the member's right to vote at the meeting at which the right is to be exercised.

B 42 The emblem of each grade of membership approved by the Council shall be worn by those only who belong to that grade. The official stationery shall be used only by Officers and Committees of the Society.

B 43 The abbreviation of the titles of the various grades of membership approved by the Society are as follows:

For Honorary Members... Hon.Mem.Am.Soc.M.E.

For Members..... Mem.Am.Soc.M.E.

For Associates..... Assoc.Am.Soc.M.E.

For Juniors..... Jun.Am.Soc.M.E.

B 44 Standards for the conduct of the business affairs of the Society, of its professional or business meetings and of its Committees and their activities may be established, amended or annulled by a two-thirds vote of the members of the Council present at a meeting, provided that a written notice of the proposed addition or change may have been given at a previous meeting of the Council, and provided further that the Secretary shall have sent to each member of the Executive Committee (acting as a Committee on Standards) a draft of the proposed addition or change at least two weeks prior to the meeting at which they are to be voted on.

B 45 Directions for the conduct of the business affairs of the Society may be established by the Secretary and the work covered shall be carried out as provided by these Directions. These

Directions may be added to, amended or annulled by the Secretary, but it shall be his duty to send to each member of the Executive Committee (acting as a Committee on Standards) a draft of the change before it is put into effect.

RESEARCH COMMITTEE

B 46 The Research Committee shall consist of five Members, Associates or Juniors. The term of office of one member of the committee shall expire at the end of each Annual Meeting.

B 47 This committee shall have supervision of such research or investigations as may be directed or approved by the Council; shall correspond and collaborate with committees of kindred technical, scientific or other societies; shall keep in touch with researches conducted in other countries, which are of value to the engineer, and shall report the same quarterly to the Council.

B 48 The Committee will be expected to maintain a system of announcement of results of research, and the trend of investigations, in any field, which will be of value to the engineering profession.

B 49 Gifts or bequests to the Society for the conduct of research or investigation shall be expended under the direction of the Council and shall be kept separate from other Society funds.

RULES

R 1 The Secretary's office shall be open on business days from 9 a.m. to 5.30 p.m. During the Annual Meeting, the office shall be open from 9 a.m. to 10 p.m. A register shall be kept for each regular meeting, to record the attendance of members and guests.

R 2 The Secretary shall provide a badge or pin for each member or guest attending the Annual and Semi-Annual Meetings; the badge of each Member, Associate and Junior to bear his name.

R 3 The Secretary shall, at each regular meeting of the Society, distribute at the headquarters a printed list of the names registered at the meeting.

R 4 Papers accepted by the Committee on Meetings shall be classified as follows:

(a) Papers valuable for record, but not suitable for presentation at a meeting, which will be referred to the Publication Committee with the recommendations of the Committee on Meetings.

(b) Papers requiring either advance publication or printing and distribution in pamphlet form, either in full or in abstract, for discussion at a meeting.

Papers of this class the Committee on Meetings may either turn over at once to the Publication Committee for advance publication in The Journal if approved by that Committee; or it may have printed in pamphlet form a sufficient number of copies for distribution at a meeting, for mailing in advance to those who may discuss the paper and to others who may desire copies because of publication of the title or an advance abstract of the paper in The Journal.

(c) Papers which require discussion at a meeting to determine their value and general interest.

Papers of this class may be accepted by the Committee on Meetings, but should not be put in type until they have been read and discussed.

The Committee on Meetings may, in its discretion, select papers for the Annual or Semi-Annual Meetings which have already been presented and discussed before local meetings of the Society.

A member may by letter signify his intention to discuss any of the papers, and unless otherwise directed by the Presiding Officer, priority in debate shall be given in the order of the receipt by the Secretary of such notification.

R 5 At professional sessions, each paper shall be read by abstract only, ten minutes being allowed to the author for the presentation unless otherwise ordered by the meeting.

R 6 A member who has given notice of his intention to discuss a paper, and shall have reduced his discussion to writing, shall be entitled to ten minutes for its presentation.

R 7 Each speaker shall be limited to five minutes in the oral discussion of a paper unless the time should be extended by unanimous consent. A member who has once had the floor cannot claim it again until all the others have been heard who

desire to speak on that paper. Authors may have five minutes to close the discussion on the paper.

R 8 Members unable to attend the meeting may send a discussion of any paper in writing, to be presented by the Secretary.

R 9 The Committee on Meetings shall deliver to the Secretary such papers as they recommend for presentation to the professional meetings of the Society.

R 10 The Secretary shall have sole possession of papers and illustrations between the time of their approval by the Committee on Meetings and their presentation to the professional session of the Society.

R 11 After the presentation and discussion of a paper, a copy of both shall be sent to the author, and, so far as possible, a copy of the reported discussion shall be sent to each member who presented it, with the request that he correct errors or omissions, and return the same promptly to the Secretary.

R 12 Members may order reprints of papers at a price sufficient to cover the cost to the Society, provided that said copies are not for sale.

R 13 The features of the program outside of the professional and business sessions to be provided for the members and guests at any meeting of this Society in any city shall be in charge of a Local Committee, subject, however, to the general approval of the Committee on Meetings. The President's reception of the Annual Meeting shall be in charge of the House Committee under the general supervision of the Committee on Meetings.

R 14 A member may invite a non-member to the professional sessions of the meeting, but the guest shall not take part in the proceedings without an invitation from the Presiding Officer. Invitations to guests of members for the entertainments provided for the Society shall be in the discretion of the Local Committee.

R 15 The Library of the Society shall be conducted as a free public reference library of engineering and the allied arts and sciences. It will be open on all week days between the hours of 9 a.m. and 9 p.m., except New Year's, Independence, Thanksgiving and Christmas Days. The rooms of the Society shall be open for the use and the convenience of members during the usual business hours.

R 16 Juniors who were elected to membership in the Society six years or more previous to the adoption of this Constitution shall pay the same dues as an Associate, beginning with the fiscal year which opens after such adoption. Juniors, who have been elected less than six years before that date, shall pay the dues of an Associate on the expiration of six years after their election.

R 17 Ballots for amendments to the Constitution shall be canvassed and announced in the same manner as the ballots for officers for the Society.

R 18 The American Society of Mechanical Engineers will furnish monthly issues of The Journal to all members of affiliated organizations who are not members of The American Society of Mechanical Engineers upon the payment by each of two dollars per year, such payment being due January 1 of each year. The American Society of Mechanical Engineers will furnish gratis to each affiliated body, extra copies of advance papers for

use at its meetings, the number furnished to be agreed upon at the discretion of the Secretary.

PROFESSIONAL SECTIONS AND GEOGRAPHICAL GROUPS

R 19 A professional section or a geographical group of the Society shall consist of Honorary Members, Members, Associates, and Juniors of The American Society of Mechanical Engineers and of other persons to be designated Affiliates as hereinafter described.

R 20 A professional section of The American Society of Mechanical Engineers may, with the approval of the Council, be organized for the consideration of any engineering, scientific, or professional topic, provided that a number satisfactory to the Council, of Members of The American Society of Mechanical Engineers, unite in making written request for such an organization. A similar procedure shall apply to geographical groups. Such a section or group shall be designated as ——— Section or ——— Group of The American Society of Mechanical Engineers, —the blank being filled by the topic specialized or name of locality.

R 21 The provisions of the Constitution, By-Laws and Rules of The American Society of Mechanical Engineers, and the precedents of the Society with respect to professional sessions for the discussion of papers, shall cover the procedure of the professional sections or geographical groups except that no meeting of a section or group shall be considered a meeting of the Society as a whole.

R 22 For the convenient conduct of its professional affairs the section or group shall organize an Executive Committee of five members of the Society, under the general direction of the Council. Such officers as the section or group shall require must be selected from the membership of the Society. Other committees of the section or group shall be appointed by its Executive Committee.

R 23 The Executive Committee of the section or group, subject to the approval and direction of the Secretary of the Society, shall designate a Secretary of the section or group, whose duties shall be those usually attaching to the Secretary of a professional section, and who shall also see that the discussions of papers are satisfactorily reported and transmitted to the Secretary of the Society.

R 24 Expenditures for the purpose of a section or group chargeable to the Society must be authorized by the Secretary of the Society before they are incurred, and must be provided for in the estimate and budget approved by the Council. No liability otherwise incurred shall be binding on the Society. Any expenditure not so provided must be met by the section or group itself.

R 25 Engineers and others not members of The American Society, but desiring to participate in the meeting of the section or group, may enroll themselves as Affiliates as heretofore provided, with the approval of the Executive Committee of the section or group. Such Affiliates shall have the privilege of presenting papers and taking part in the discussions. They shall pay \$5 per annum, which shall be due and payable in advance, on October 1st of each year of their enrollment, and shall thereby

be entitled to receive the regular issues of The Journal for a period covered by their dues.

R 26 The Council of The American Society of Mechanical Engineers may, at sixty days notice, suspend or disband any section or group.

STUDENT BRANCHES

The following rules with respect to Student Branches, among students of engineering and technical schools, have been added to the rules for the guidance of the organization of branches:

R 27 The name of this Association shall be "_____ Affiliated with The American Society of Mechanical Engineers"; or, the "_____ Student Branch of The American Society of Mechanical Engineers."

R 28 The basis of such an affiliation shall be the independence, autonomy and self-control of each affiliated body under its own by-laws; subject to such limitation as may be set by the Council.

R 29 Each affiliated society shall furnish to the Secretary of The American Society of Mechanical Engineers, satisfactory reports of discussions and business transacted at its meetings; also copies of all papers and addresses presented.

R 30 Upon recommendation of each affiliated society, the President of The American Society of Mechanical Engineers, after conference with the Secretary of the Society, shall appoint a member of the latter body to be Honorary Chairman of each affiliated society, for each year. Such Honorary Chairman shall be, ex-officio, a member of the Governing Committee of said affiliated society.

R 31 The Presiding Officer chosen by each affiliated society shall be styled Chairman of the _____ Affiliated with The American Society of Mechanical Engineers; or, Chairman of the _____ Student Branch of The American Society of Mechanical Engineers.

R 32 The affairs of the affiliated society shall be managed by a Governing Committee of at least three members, besides the Honorary Chairman.

R 33 The names which designate any committees appointed by the affiliated societies shall be different from the names of corresponding committees of The American Society of Mechanical Engineers.

R 34 The affiliated society shall have the privilege of having printing done by The American Society of Mechanical Engineers at cost. Where the affiliated society desires to publish any papers in local journals or elsewhere, it shall first ascertain that The American Society of Mechanical Engineers does not itself desire to publish such paper and the privilege of priority in publication shall always be the right of The American Society of Mechanical Engineers. The affiliated society shall claim no exclusive copyright upon such papers.

TELLERS

R 35 The Tellers of Election in counting the ballots for officers shall consider a ballot for an officer as valid, providing the intent of the voter as to that particular office is clear, even though his ballot as to candidates for another office may for any reason be invalid.

AFFILIATED SOCIETIES

R 36 Any regularly organized group of engineers or engineering society, which by Constitution, By-Laws and practice, is in accord with the traditions and aims of The American Society of Mechanical Engineers, may secure affiliation on approval by the governing boards of each Society.

R 37 The term "affiliated with The American Society of Mechanical Engineers" shall not be used officially or by individual members until specific approval has been secured by each governing board, nor shall such term be used by either after the relation of affiliation has terminated.

R 38 An affiliated society shall have independence, autonomy and self-control under its own constitution and by-laws, unimpaired by its relation with The American Society of Mechanical Engineers.

R 39 The American Society of Mechanical Engineers shall not be responsible for any act of an affiliated society.

R 40 Printing for an affiliated society will be done at cost; this applies also to the printing in pamphlet form of advance copies of all papers presented before The American Society of Mechanical Engineers and such papers as may be desired for meetings of an affiliated society. The Society may print in The Journal any papers and discussions presented before an affiliated society, which the Publication Committee of The American Society of Mechanical Engineers may select.

R 41 The members of an affiliated society shall have the right to subscribe and receive The Journal on the same terms as other affiliates of The American Society of Mechanical Engineers.

R 42 The relation of affiliation with any organization may be terminated by either party upon sixty days' notice, given in writing by the governing body of either society, to that of the other.

**THE AMERICAN SOCIETY OF
MECHANICAL ENGINEERS**

**INDEX TO
CONSTITUTION, BY-LAWS
AND RULES**

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